



# ESTONIAN LANGUAGE

LINGUISTICA URALICA  
SUPPLEMENTARY SERIES / VOLUME 1

# ESTONIAN LANGUAGE

**Edited by Mati Erelt**

Estonian Academy Publishers  
Tallinn

EESTI TEADUSTE AKADEEMIA  
ESTONIAN ACADEMY OF SCIENCES

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Abstracted/indexed in: Bibliographie Linguistique. Linguistic Bibliography (Permanent International Committee of Linguists, Netherlands); MLA Directory of Periodicals (Modern Language Association, USA); LLBA. Linguistics & Language Behavior Abstracts (Sociological Abstracts, USA); EBSCO Publishing Database; European Reference Index for the Humanities (ERIH).

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SUPPLEMENTARY SERIES / VOLUME 1

ESTONIAN LANGUAGE

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Second Edition

Tallinn 2007

First Edition 2003

ISSN 0868-4731  
ISBN 978-9985-50-399-7

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# PREFACE

The Estonian language belongs to the Finnic group of the Finno-Ugric language family. Today there are about 1.1 million native speakers of Estonian. Most of them (about 0.94 million) live in the Republic of Estonia, the rest (about 0.16 million) are scattered outside Estonia, with larger communities in Russia, the USA, Canada, and Sweden.

The Estonian language developed on the basis of the converging tribal dialects (or languages) that were spoken in the Estonian area – the North Estonian dialect or the Maa dialect and the South Estonian dialect or the Ugala dialect – possibly in the 13<sup>th</sup>–16<sup>th</sup> centuries. Standard Estonian started to develop in the 16<sup>th</sup> century. However, due to dialect differences at first Standard Estonian was not uniform but had two standard varieties – North Estonian or the Tallinn language and South Estonian or the Tartu language. Gradually Standard North Estonian started to predominate in the 18<sup>th</sup> century, especially after the publication of the North Estonian Bible in 1739. It gained the final victory over Standard South Estonian during the period of national awakening in the second half of the 19<sup>th</sup> century. The common standard language gave rise to the common spoken variety of educated Estonians and later the entire Estonian nation; the local dialects started to decline.

The standard language became uniform by means of the language reforms of the early 20<sup>th</sup> century. These reforms made it possible to use Estonian in all of its functions, including the language of science and higher education. Estonian was the official language of the Republic of Estonia in 1919–1940 and regained this status once again in 1988. Its use is regulated by the Language Law.

Typologically Estonian is an agglutinating language but more fusional and analytic than the languages belonging to the northern branch of the Finnic languages. Estonian has been influenced by a number of languages, in the early period of the standard language especially by German but later also by Finnish and Russian. English is a major influence for the present-day usage.

The first descriptions of the Estonian language were published as early as in the 17<sup>th</sup> century. However, the scientific research of Estonian started at the beginning of the 19<sup>th</sup> century. The year 1803 witnessed the beginning of teaching the Estonian language at the University of Tartu. National research into Estonian began at the end of the 19<sup>th</sup> century, during the period of national awakening. The first Estonian-language descriptions of Estonian were published during this period. More purposeful and fruitful research into Estonian

developed after the professorship of the Estonian language was set up at the University of Tartu in 1919.

There are very few general surveys of the Estonian language for the international reader, and the existing ones were published a long time ago. The most recent and the best one is *Introduction to Estonian Linguistics* by Alo Raun and Andrus Saareste (Ural-Altaische Bibliothek XII. Wiesbaden, 1965). The present volume attempts to fill this gap and to provide a comprehensive account of the Estonian language to the international reader – its structure, origin and development, standard language, dialects, spoken language, and the study of Estonian. The authors include Tiit-Rein Viitso, Professor of Finnic languages; Karl Pajusalu, Professor of History and Dialects of the Estonian Language; Mati Ereht, Professor of the Estonian Language (all three work at the University of Tartu); Tiiu Ereht, Senior Researcher at the Institute of the Estonian Language; Heli Laanekask, Lecturer in Estonian at the University of Oulu, and Leelo Keevallik, Researcher at the University of Uppsala. Enn Veldi, Associate Professor at the University of Tartu, made a significant contribution to this volume by translating a large part of the text into English. Mai Tiits, Researcher at the Institute of the Estonian Language, prepared the manuscript for publication.

The writing and publication of this book was generously funded by the Estonian Ministry of Education and Research. The publication was additionally funded by the Faculty of Philosophy of the University of Tartu and the Department of English of Tallinn Pedagogical University.

Tartu, June 2003

Mati Ereht

# I. STRUCTURE OF THE ESTONIAN LANGUAGE

## PHONOLOGY, MORPHOLOGY AND WORD FORMATION\*

*Tiit-Rein Viitso*

### 1. Alphabet

The Estonian alphabet as used for writing words of the Estonian language includes the following letters:

A B D E F G H I J K L M N O P R S Š Z Ž T U V Õ Ä Ö Ü  
a b d e f g h i j k l m n o p r s š z ž t u v õ ä ö ü

Note the aberrant position of the otherwise last letter of the Latin alphabet <z> and <ž>. The letters <f š z ž> occur only in late borrowings. Similarly, the letters <b d g> at the beginning of a word indicate that the word is a late borrowing.

Both <b d g z ž> and <p t k s š> at the beginning of a word stand for strong voiceless consonants [p t k s š]<sup>1</sup> Elsewhere <b d g z ž> stand usually

\* The study was supported by grant no. 4643 of the Estonian Science Foundation.

<sup>1</sup> Where needed the Finno-Ugric Phonetic Alphabet (FUPA) is used. In FUPA, special diacritics indicate relative duration of segments. Listed (with the vowel *a*) in order of increasing quantity, these are for vowels [ä a à ã ā ǣ â] or undershort, full-short, half-long, underlong, full-long, overlong and extra long. These quantities can be approximately rendered by means of the International Phonetic Alphabet (IPA) as [ä a aː aːː aːːː] where [aː] stands both for underlong and full-long vowels. For consonants, the repertoire of relative durations is shorter. Listed (with the postvocalic alveolar stop *d/t*) in order of increasing quantity, these are [d t̪ t̪̃] in the word final position and [d̪ t̪̃ t̪̃̃] in the prevocalic position; the lists correspond to [d̪ t̪̃ t̪̃̃] and [d̪̃ t̪̃̃ t̪̃̃̃] in IPA. In FUPA, the primary stress in a word is indicated by a raised period after the first vowel of the stressed syllable, the secondary stress by a colon after the first vowel of the corresponding syllable. As the main stress falls mostly on the initial syllable in Estonian, the primary stress is usually indicated only when falling on non-initial syllables. The phrase stress gives prominence to a word in view of greater intensity and/or higher pitch; the phrase stress is indicated by two raised periods.

for voiceless weak consonants [B D G Z Ž]; e.g. *kägudega* [kä·guDe:Ga] ‘with cuckoos’. Still in late borrowings before or after <p t k s b d g z ž>, the stop letters <b d g z ž> are pronounced as strong stops; e.g. *abstraktsioon* [a:ṗstraktsjõ·n] ‘abstraction’, *abduktsioon* [a:ṗtuktsjõ·n] ‘abduction’, *radža* [ra·ĩša] ‘raja’. The letters <p t k> stand for strong voiceless consonants. In an intervocalic position they render short geminates [ṗp ĩt/ĩt k̄k šš] when following a short monophthong of the stressed syllable (*lipud* [liṗpuḅ] ‘flags’); and long geminates [pp tt/ťt kk šš] when following a long monophthong or a diphthong of a stressed syllable or a vowel of an unstressed syllable; cf. *aitate* [aittatte] ‘you (Pl) help’. The letter <s> stands for the strong voiceless sibilant [s] at the beginning of a word, at the beginning of a consonant cluster, and after an obstruent. In an intervocalic position, it stands for the weak voiceless sibilant [z], at the end of a cluster when preceded by a sonorant consonant, and after a vowel at the end of a word. The Estonian spelling does not reflect consonant palatalization and, in most cases, the so-called syllabic quantity (cf. 2.1.2).

The letter <õ> stands in Standard Estonian for a mid illabial back vowel [e] or, if long, a mid or mid-high illabial back vowel. Long vowels are written by means of two identical letters.

When rendering foreign names from languages using Latin scripts, Estonian spelling strictly follows the source. In that case the position of the otherwise unexploited letter <c> in the alphabet is normal; <x> and <y> are ordered last.

## 2. Phonology

### 2.1. Prosody

#### 2.1.1. Word, syllable, and foot

A word consists of at least one syllable.

A syllable in Estonian contains one or two vowels optionally preceded by 1–3 and optionally followed by 1–4 consonants. An initial consonant cluster in an initial syllable signals that the word is expressive or borrowed, the word *praegu* ‘now’ (<\*para aikoihen) being the single exception. Syllables are either stressed or unstressed. Stressed syllables are either short or long.

A short stressed syllable ends in a short monophthong. A long stressed syllable has either a short monophthong followed by one or several consonants or a long monophthong or a diphthong that is optionally followed by one or several consonants.

An unstressed syllable has usually one vowel, optionally followed by 1–2 consonants. After a long stressed syllable of Q3 the unstressed syllable

may optionally have a diphthong ending in *i* that is always followed by 1–2 consonants; for conditions of the occurrence of diphthongs in unstressed syllables cf. 2.2.2.

Although it is possible to theoretically coin non-compounds consisting of 12 syllables, e.g. *vastastikustatamatumatetagi* ‘even without the ones who cannot be arranged as more mutual’, non-compound words are rarely longer than 5 syllables.

Except some monosyllabic words that have no stress (cf. 2.1.5), a word has at least one stressed syllable. Usually the initial syllable of a word carries a stress. An unstressed initial syllable in a polysyllabic word signals that the word is an interjection or borrowed.

Depending on the number of stressed syllables, a word consists of one or more feet (or stress groups). Only an initial foot may begin in an unstressed syllable. The stressed syllable that carries either the primary or a secondary stress can be followed by one or two unstressed syllables.

### 2.1.2. The so-called syllabic quantities

In feet consisting of at least two syllables there exists a tripartite correlation of three so-called syllabic quantities of stressed syllables, traditionally referred to as quantity 1, quantity 2, and quantity 3 (hereafter Q1, Q2, and Q3). This correlation is based (a) on syllable length, i.e. on the contrast of SHORT and LONG stressed syllables and (b) on syllable weight, i.e. on the contrast of LIGHT and HEAVY stressed syllables, cf. Table 1.

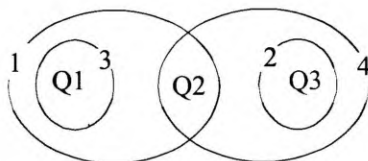
**Table 1.** Syllabic quantity in Estonian

		Syllable length	Syllable weight
Syllabic quantity	Q1	short	light
	Q2	long	
	Q3		heavy

Syllable weight results from the confluence of several factors such as tone, intensity, and the proportion of the duration of the stressed syllable and the following unstressed syllable. A heavy stressed syllable, or a syllable of Q3, can form a foot on its own (*suu* [sû] ‘mouth’, *konn* [koñ] ‘frog’, *kord* [koɾɔ] ‘order’, *part* [paɾi] ‘duck’) whereas a light syllable can form a stress group only when followed by at least one unstressed syllable, cf. Figure 1. Nevertheless, both light and heavy stressed syllables can be followed by not more than two unstressed syllables. In most of the North Estonian area, i.e. in the

historical cradle of modern Estonian, a syllable of Q3 can serve as a foot only as a word or when followed by a non-final syllable of Q3. Below, in words written in conventional spelling, all syllables of Q1 and Q2 are additionally marked with an acute accent (´) and syllables of Q3 with a grave accent (`).

A stressed syllable is short and, hence, light and of Q1 if it ends in one single short monophthong (´*e-lu* [*e·lù*] ‘life’). A short stressed syllable is followed by an unstressed syllable whose vowel is usually considerably longer than that of a short syllable. A stressed syllable is long and either of Q2 or Q3 if it ends in a consonant, long monophthong, or diphthong. Statistically, the stressed syllables of Q3 are longer than syllables of Q2 whereas the directly following unstressed syllables are shorter after syllables of Q3 and longer after syllables of Q2. So, there exists a kind of counter-proportionality of durations of the first two syllables between feet of Q3, Q2 and Q1, often referred to as foot isochrony.



**Figure 1.** Interrelations of syllables of Q1, Q2, and Q3

**Key:** 1 light syllables: a syllable forms a stress group only when followed by at least one unstressed syllable; 2 heavy syllables: a syllable can form a stress group on its own; 3 short stressed syllables: a stressed syllable ends in a short monophthong; 4 long stressed syllables: a stressed syllable ends either in a long monophthong, diphthong, or at least one consonant.

A long stressed syllable is of Q2 if it has a full-long monophthong, a diphthong whose both components are short, or ends in one or two short consonants or the short initial component of a geminate, e.g. *piinad* [*pīnad*] ‘pains’, *saate* [*sätte*] ‘you (Pl) get’, *auto* [*äüto*] ‘car’, *naeris* [*naëriz*] ‘turnip’, *enne* [*eñne*] ‘omen’, *salgas* [*salgaz*] ‘in the band’, *kaarte* [*kärte*] ‘arch (GPl)’, *heinte* [*heĩntte*] ‘hay (GPl)’. Except for some foreign proper names, the co-occurrence of both a long monophthong or a diphthong and a geminate obstruent in a word with a syllable of Q2 is restricted (a) to genitive plural forms of some nouns and (b) to the second-person present-tense forms of monosyllabic vocalic verb stems, both of which have the suffix *-te*.

A long stressed syllable is of Q3 if it has an overlong monophthong, a long diphthong, or a long consonant or a long consonant cluster, cf. *piinad* [*pīnad*] ‘you (Sg) torment’, *saate* [*sätte*] ‘broadcast (GSg)’, *autu* [*äuttu*] ‘dishonest’, *naeris* [*naëriz*] ‘he laughed’, *kallas* [*kallaz*] ‘it poured’, *enne* [*eñne*] ‘before’, *salgas* [*salgaz*] ‘he denied’, *kaarte* [*kärtte*] ‘card (PPl)’

Syllables of Q3 may have a more complicated structure than light long syllables, for example, they may contain clusters consisting of three or more consonants (*tursk* [*tursk*] ‘cod’, *vintskleb* [*viniskleb*] ‘he rolls about’) or certain diphthongs whose occurrence is limited only to syllables of Q3 (*kaotus* [*kaottuz*] ‘loss’), cf. also Table 10.

2.1.3. Tone

In addition to these features, the contrast between Q1, Q2, and Q3 is usually supported by the difference in positions of pitch peak in the stressed syllable: a syllable of Q1 has a prevailingly rising pitch that is followed by a short fall, a syllable of Q2 has a rising-falling pitch, and a syllable of Q3 has a level or a falling pitch that can be preceded by a short rise.

2.1.4. Quantity patterns

Resulting from the fact that Estonian has both short and long vowels as well as consonants (or geminates) whose duration varies depending on the syllabic quantity, syllable, and foot structure, Estonian has a complicated system of contrastive quantity patterns of sound sequences beginning from the vowel of the primarily stressed syllable and ending with the vowel of the following unstressed syllable, especially of monophthong and stop sequences, cf. Tables 2.1 and 2.2. Monophthong and resonant sequences are considerably simpler, cf. Tables 3.1 and 3.2. Diphthongs behave largely similarly to long monophthongs, cf. Tables 4.1 and 4.2. Resonant and stop sequences are more complicated than clusters of other consonants, cf. Tables 5, 6, 7.1, and 7.2.

Table 2.1. Homomorphemic monophthong and stop sequences

	Disyllabic stem			Monosyllabic stem
	Q1	Q2	Q3	Q3
Q1	<i>'lagi</i> <sup>1</sup> [ <i>lagi</i> ]	<i>'saki</i> <sup>2</sup> [ <i>sakki</i> ]	<i>'sakki</i> <sup>3</sup> [ <i>sakki</i> ]	<i>sakk</i> <sup>4</sup> [ <i>sak</i> ]
Q2	<i>'saagi</i> <sup>5</sup> [ <i>sāgi</i> ]	<i>'ruutu</i> <sup>6</sup> [ <i>rūttu</i> ]		
Q3	<i>'saagi</i> <sup>7</sup> [ <i>sāgi</i> ]		<i>'saaki</i> <sup>8</sup> [ <i>sākki</i> ]	<i>'saag</i> <sup>9</sup> [ <i>sāg</i> ] <i>'saak</i> <sup>10</sup> [ <i>sāk</i> ]

**Key:** 1 *'lagi* ‘ceiling’ 2 *'saki* ‘jag (GSg)’ 3 *sakki* ‘jag (PSg)’ 4 *sakk* ‘jag’ 5 *saagi* ‘yield; prey, plunder (GSg)’ 6 *ruutu* ‘diamonds (Sg)’ (of a playing card), 7 *saagi* ‘saw (PSg)’ 8 *saaki* ‘yield (PSg), 9 *saag* ‘saw’ 10 *saak* ‘yield, prey, plunder’

**Table 2.2.** Monophthong and stop sequences  
at the morpheme boundary

	Q1	Q2	Q3
Q1	'se/da <sup>1</sup> [seɖà]		sakk/ki <sup>4</sup> [sǎǩ,kǐ]
Q2	'saa/ge <sup>2</sup> [sāge]	'saa/te <sup>3</sup> [sā̃te]	
Q3		maa/ke <sup>5</sup> [mā̃kkē]	saak/ki <sup>6</sup> [sā̃ǩ,kǐ]
	'saa/gi <sup>7</sup> [sāgǐ]		saag/ki <sup>8</sup> [sā̃ǧ,kǐ]

**Key:** 1 'se/da 'this (PSg)', 2 'saa/ge 'you (Pl) get!', 3 'saa/te 'you (Pl) receive' 4 sakk/ki 'even a/the jag' 5 maa/ke 'small country (diminutive)' 6 saak/ki 'even a/the yield', 7 saa/gi 'you (Sg) just get' 8 'saag/ki 'even a/the saw'

**Note.** Slash stands for morphological boundaries not reflected in the orthography.

**Table 3.1.** Homomorphemic monophthong  
and resonant sequences

	Disyllabic stem			Monosyllabic stem
	Q1	Q2	Q3	Q3
Q1	'vina <sup>1</sup> [vinà]	'linna <sup>2</sup> [liñna]	'linna <sup>3</sup> [liñnā]	'linn <sup>4</sup> [liñ]
Q2	'viina <sup>5</sup> [vĩna]			
Q3	'viina <sup>6</sup> [vĩnā]			'viin <sup>7</sup> [vĩn]

**Key:** 1 vina 'streak of vapour or smoke', 2 'linna 'town, city (GSg)' 3 'linna 'town, city (PSg)' 4 'linn 'town, city' 5 'viina 'vodka (GSg)' 6 'viina 'vodka (PSg)' 7 'viin 'vodka'

**Table 3.2.** Monophthong and resonant sequences  
at the morpheme boundary

Q1	'se/ni <sup>1</sup> [seni]
Q2	'vii/me <sup>2</sup> [vĩme]
Q3	siin/ne <sup>3</sup> [sĩ̃ň,nē]
	'vii/ma <sup>4</sup> [vĩmā]

**Key:** 1 'se/ni 'up to that time (Ter)', 2 'vii/me 'we take or carry farther' 3 'siin/ne 'the one over here', 4 'vii/ma 'to take or carry farther (Sup)'

**Table 4.1.** Homomorphemic diphthong and stop sequences

	Disyllabic stem		Monosyllabic stem
	Q2	Q3	Q3
Q2	'laugu <sup>1</sup> [laũgu] 'Pauka <sup>2</sup> [paũkka]		
Q3	'laugu <sup>3</sup> [laũgũ]	'lauku <sup>4</sup> [laukkũ]	'laug <sup>5</sup> [laũg] 'lauk <sup>6</sup> [lauk]

**Key:** 1 'laugu' 'leek (GSg)', 2 'Pauka' (a popular dog's name), 3 'laugu' 'eyelid (PSg)'. 4 'lauku' 'leek (PSg)' 5 'laug' 'eyelid' 6 'lauk' 'leek'

**Table 4.2.** Diphthong and stop sequences at the morpheme boundary

Q2	'sai/te <sup>1</sup> [saiĩte]		
Q3	'lauk/ki <sup>2</sup> [laukĩki]		
	'laug/ki <sup>3</sup> [laũgĩki]		
	'lau/gi <sup>4</sup> [laũgi]	'lau/ke <sup>5</sup> [laũkkẽ]	

**Key:** 1 'sai/te' 'you (PI) received', 2 'lauk/ki' 'even the leek' 3 'laug/ki' 'even the eyelid'. 4 'lau/gi' 'even the eyelid (GSg)' 5 'lau/ke' 'small eyelid (diminutive)'

**Table 5.** Homomorphemic resonant clusters

	Disyllabic stem		Monosyllabic stem
	Q2	Q3	Q3
Q2	'varna <sup>1</sup> [vařna]	'varna <sup>3</sup> [vařnã]	'varn <sup>4</sup> [vařn]
Q3	'kaarna <sup>5</sup> [kãrnã]		

**Key:** 1 'varna' 'peg, rack (GSg)', 3 'varna' 'peg, rack (PSg)', 4 'varn' 'peg, rack (NSg)', 5 'kaarna' 'raven (GSg)'

**Table 6.** Homomorphemic monophthong, stop and resonant sequences

	Q2	Q3
Q2	'adra <sup>1</sup> [adrã] nitro <sup>2</sup> [niĩtro]	'atra <sup>3</sup> [atrã]
Q3	'kaadri <sup>4</sup> [kãdri]	'kaatri <sup>5</sup> [kãĩri]

**Key:** 1 'adra' 'plough (GSg)', 2 'nitro' 'nitro-' 3 'atra' 'plough (PSg)'. 4 'kaadri' 'cadre, personnel (GSg)' 5 'kaatri' 'speed boat (GSg)'

**Table 7.1.** Homomorphemic monophthong, resonant and stop sequences

Disyllabic stem		Monosyllabic stem
Q2	Q3	Q3
<i>tordi</i> <sup>1</sup> [tořdi]	<i>kordi</i> <sup>2</sup> [kořdi]	<i>kord</i> <sup>3</sup> [kořd]
<i>poordi</i> <sup>4</sup> [pořdi]	<i>poordi</i> <sup>5</sup> [pořdi]	<i>poord</i> <sup>6</sup> [pořd]
<i>narta</i> <sup>7</sup> [nařta]	<i>torti</i> <sup>8</sup> [tořti]	<i>tort</i> <sup>9</sup> [tořt]
	<i>poorti</i> <sup>10</sup> [pořti]	<i>poort</i> <sup>11</sup> [pořt]

**Key:** 1 *tordi* 'cake (GSg)', 2 *kordi* 'occasion, time (PPl)' 3 *kord* 'occasion, time'. 4 *poordi* 'ship's board (GSg); border of a fabric or rug (GSg)' 5 *poordi* 'ship's board (PSg)' 6 *poord* 'ship's board (NSg)', 7 *narta* 'reindeer sledge' 8 *torti* 'cake (PSg)' 9 *tort* 'cake (NSg)' 10 *poorti* 'border of a fabric or rug (PSg)' 11 *poort* 'border of a fabric or rug (NSg)'

**Table 7.2.** Monophthong, resonant and stop sequences at the morpheme boundary

Q2	Q3	Q3
<i>sur/ge</i> <sup>1</sup> [suřge]	<i>sur/di</i> <sup>2</sup> [suřdi]	<i>murd/ke</i> <sup>3</sup> [muřdke]
	<i>suur/de</i> <sup>4</sup> [suřde]	<i>poord/ki</i> <sup>5</sup> [pořdki]
<i>var/te</i> <sup>6</sup> [vařte]		<i>kurt/ke</i> <sup>7</sup> [kuřkē]
<i>suur/te</i> <sup>8</sup> [suřte]		<i>poort/ki</i> <sup>9</sup> [pořki]

**Key:** 1 *sur/ge* 'die! (2Pl)' 2 *sur/di* 'one died (Ips)' 3 *murd/ke* 'break! (2Pl)' 4 *suur/de* big (IllSg)' 5 *poord/ki* 'even a/the ship's board (NSg)' 6 *var/te* 'stalk; haft (GPl)' 7 *kurt/ke* 'complain! lament! (2Pl)' 8 *suur/te* 'big (GPl)', 9 *poort/ki* 'even a/the border of a fabric or rug'

The first row and the first column of Tables 2.1 and 3.1 present triads, which resulting from the so-called isochrony of feet show in addition to different perceivable proportions of duration of the first and second syllable also statistically valid scales of vowel or consonant lengths, which earlier were erroneously considered three distinctive quantities of vowels and consonants.

### 2.1.5. Word stress in native words

In native words, the primary stress is usually on the first syllable, with the exception of some interjections, e.g. *ai tãh* [aittãh] 'thanks', *ai tũma* [aittũmã] 'thanks', *ennãe* [ennãe] 'see!'

There is a strong tendency towards trochaic stress patterning and to dactylic word-final feet if the trochaic patterning cannot be applied. Thus, secondary

stresses usually fall on odd syllables counting from primarily stressed syllables: *vestlesime* [ve·štlezi:me] ‘we conversed’, *vestlesin* [ve·štlezin] ‘I conversed’, *paranesime* [pa·rane:zime] ‘we got well’, *vastandataivatelegi* [va·štanda:ītava:ītele:gi] ‘even to the ones being confronted’ This tendency is to some extent counteracted by certain derivational affixes that attract secondary stress, especially after non-initial syllables: *söömine* [sõ·mine] ~ [sõ·mi:ne] ‘eating (noun)’, GSg *söömise* [sõ·mize] ~ [sõ·mi:ze], *elajalik* [e·lajali:k] ‘beastly’, *ilusamate* [i·lusa:matte] ~ [i·lusama:īte] ‘of more beautiful ones (GPI)’, *paranemise* [pa·ranemi:ze] ‘of recovery (GSg)’, *vastandamine* [va·štandami:ne] ‘confronting’, cf. Table 8. Anyway the secondary stress on the final syllable of a disyllabic or trisyllabic word and on a syllable of Q1 or Q2 preceded by a syllable of Q3 is to a great extent an archaic peripheral feature that have been replaced by trochaic and dactylic stress patterns first of all in the historical cradle of modern Estonian. This has certain consequences in the field of morphophonology, cf. 2.4.1.

**Table 8.** Stress patterns in words up to five syllables

No. of syllables	Pattern	Example	Gloss
1	P	‘suu [sû·]	‘mouth’
	U	ma [ma]	‘I’
2	PM	‘pet`lik [pe·ili:k]	‘deceptive’
	PU	‘mina [mi·nä]	‘I’
3	PMU	‘joo`mine [jõ·mi:ne]	‘drinking’
	PUM	‘õnne`lik [e·ñneli:k]	‘happy’
	PUU	‘sadamad [sa·damad]	‘harbours’
4	PMUU	‘joo misega [jõ·mi:zega]	‘with drinking (ComSg)’
	PUUM	‘elaja`lik [e·lajali:k]	‘beastly (adj.)’
	PUMU	‘lükka`mine [lũ·kkami:ne]	‘pushing (noun)’
	PUAU	‘lükka sime [lũ·kkazi:me]	‘we pushed’
5	PMUAU	‘joo mise gagi [jõ·mi:zega:gi]	‘even with drinking’
	PUUMU	‘kogeles mine [ko·gelemi:ne]	‘stuttering (noun)’
	PUAUM	‘õpe`taja`lik [e·p̥petta:jali:k]	‘teacher-like (adj.)’
	PUAUU	‘koge`lesime [ko·gele:zime]	‘we stuttered’

**Key:** P – primarily stressed syllable, A – syllable with an automatic or rhythmical secondary stress, M – syllable with a morphologically conditioned secondary stress, U – unstressed syllable.

Some monosyllabic words have usually no stress in a sentence, notably certain short forms of personal pronouns (*ma* ‘I’, *mu* ‘my’ etc., cf. 3.5) and conjuncts (*ja* ‘and’, *ning* ‘and’, *või* ‘or’ etc., cf. 3.9). They receive stress only

when standing after a dactylic stress group or when composing a stress group together with a following monosyllabic word that usually has no stress. The third person present indicative form of the verb 'to be' *on* 'is; are' and interrogative-relative pronouns *kes* 'who', *mis* 'what; that', pro-adverbs *kus* 'where', *kust* 'where from', the conjunct *kui* 'how; than; as' are usually unstressed but may receive phrase stress. The pronouns *see* 'this' and *too* 'that' are stressed when used gesturally or anaphorically; they are unstressed when used symbolically (despite being pronounced with a short vowel, the orthography of an unstressed word in Standard Estonian is identical with that of similar stressed word):

- |   |  |
|---|--|
| (a) <i>'See poiss on tugevam kui teised</i> | 'This boy is stronger than (the) others'   |
| (b) <i>'See on tugevam kui teised</i>       | 'This (one) is stronger than (the) others' |
| (c) <i>See poiss on väga tugev</i>          | 'The boy is very strong'                   |

Similarly, the numeral *üks* 'one' is stressed and of Q3 (a) when referring to the exact number of objects or actions or 'one', (b) when used anaphorically and (c) unstressed when referring to an indefinite object or action:

- |  |   |
|--|---|
| (a) <i>'Üks mees valvab kui teised magavad</i> | 'One man guards when others are sleeping' |
| (b) <i>'Üks valvab kui teised magavad</i>      | 'One guards when others are sleeping'     |
| (c) <i>Kord üks mees ehitas maja</i>           | 'Once a man built (a) house'              |

### 2.1.6. Stress in native compounds

In a compound, all component words preserve their original stress pattern. The general stress patterning in a compound depends on the compound type. Compounds consisting of two component words belong to one of the following three main stress-pattern types:

- (a) level (i.e. the main stresses are more or less equal; this type is characteristic first of all of co-ordinate compounds),
- (b) weakening (the main stress of the preceding component is stronger than that of the following component),
- (c) strengthening (the main stress of the preceding component is weaker than that of the following component).

To distinguish between the three types, respectively, the following junctures will be used below:

- (a) =, cf. *sini*=*valge* [*si·ni·va·lge*] ‘blue-white’;  
 (b) –, cf. *üli*–*kool* [*ü·li·gô·l*] ‘university’, lit. ‘superschool’, *neli*–*sada* [*ne·li·sa·da*] ‘four hundred’;  
 (c) +, cf. *üle*+*pea* [*ü·le·be·à*] ‘on the whole, generally’, lit. ‘overhead’, *sada*+*neli* [*sa·da·ne·li*] ‘one hundred and four’ (orthographically: *sada neli*).

Stress patterning may differentiate compounds with different meanings, cf. *õhu*–*auk* ‘air vent’ and *õhu*+*auk* ‘air pocket’

As longer compounds contain at least one compound as their component, stress patterning in longer compounds depends on the stress pattern of its component compound(s) whose stress pattern remains unchanged. As a result, a simple component has either a stress equal or weaker than that of the initial component of the following compound with the weakening stress pattern (*era*=*üli*–*kool* ‘private university’, *üli*=*ette*–*vaatlik* ~ *üli*+*ette*–*vaatlik* ‘extremely cautious’, lit. ‘super forward looking’). A simple component following a two- or three-component compound with the weakening stress pattern has a stress equal or stronger than that of the first component of the compound component, whereas the second component of the compound has the weakest stress (*üli*–*kooli*+*haridus* ‘university education’, *all*–*vee*+*laev* ‘submarine’, lit. ‘underwatership’; *all*–*vee*+*laeva*+*baas* ‘submarine base’).

### 2.1.7. Stress in borrowings

Many newer borrowings have the primary stress on a non-first syllable (*žele* [*šelê*] ‘jelly’, *palee* [*palê*] ‘palace’, *kontuur* [*kontû·r*] ‘contour’). In many cases syllables of atypical structure for an uninitial syllable of non-initial feet of borrowings serve as cues for analysing them as compounds, irrespective of their morphological structure in their source language (*ame*+*tüst* [*a·mett·ü·st*] ‘amethyst’, *barbitu*+*raat* [*pa·r̥bitturâ·i*] ‘barbiturate’). In many polysyllabic borrowings the primary stress optionally varies being either on a non-first syllable or on the first syllable, or there are two equal main stresses: *inklusiivne* [*i·nkklu·zî·vne*] ~ [*i·nkklu·zî·vne*] ‘inclusive (adj.)’, *imperialism* [*i·m̥pperjali·sm*] ~ [*i·m̥pperjali·sm*] ~ [*i·m̥pperjali·sm*] ‘imperialism’ The tendency to replace the non-initial stress has created variation of quantity patterns and orthography, cf. *terminaal*– [*te·r̥minâ·l*] ‘final’ (as a first component of a compound) vs. *terminal* [*te·r̥minal*] ‘terminal (noun)’

2.1.8. Phrase stress

In Estonian, phrase stress or logical stress can be attributed either to the syllable with the primary stress or to a syllable that otherwise has a weaker stress or is unstressed. Phrase stress on a syllable is realized as an extra strength and/or higher pitch. An originally secondarily stressed or unstressed syllable becomes equal or more prominent than the primarily stressed syllable, which may mean also the substitution of Q3 for Q2, e.g. *arvata* ‘vasti’ [a·řvattava:šti] ‘presumably’ becomes [a·řvattava:šti] or [a:řvattava·šti], ‘kirjuta’ *mata* [ki·řjuttama:řta] becomes [ki·řjuttama·řta] or [ki:řjuttama·řta]. As a result of ascribing the phrase stress to an unstressed syllable, usually to a syllable containing a relevant suffix, the stress and quantity pattern of the corresponding word will be changed, e.g. from ‘kergeimad’ [ke·řgeimad] ‘the lightest ones’ to ‘ker **geimad**’ [ke·řge·řimad]. A short syllable ending in a vowel or in a weak obstruent preceded by a short vowel becomes a long syllable of Q3, cf. *suhkru ga* vöi *suhkru ta* [su·hkrugâ· vej su·hkruttâ·] ‘with sugar or without sugar?’

2.2. Vowels

2.2.1. Monophthongs

Standard Estonian distinguishes nine vowel qualities both in pronunciation and writing rendered in the Finno-Ugric Phonetic Alphabet (FUPA) and International Phonetic Alphabet (IPA) as follows:

	Front		Back	
	Illabial	Labial	Illabial	Labial
High or close	<i>i</i>	<i>ü</i>		<i>u</i>
Mid	<i>e</i>	<i>ö</i>	<i>õ</i>	<i>o</i>
Low or open	<i>ä</i>		<i>a</i>	

Orthography				FUPA				IPA			
<i>i</i>	<i>ü</i>		<i>u</i>	<i>i</i>	<i>ü</i>		<i>u</i>	<i>i</i>	<i>y</i>		<i>u</i>
<i>e</i>	<i>ö</i>	<i>õ</i>	<i>o</i>	<i>e</i>	<i>ö</i>	<i>ē</i>	<i>o</i>	<i>e</i>	<i>ø</i>	<i>ɤ</i>	<i>o</i>
<i>ä</i>			<i>a</i>	<i>ä</i>			<i>a</i>	<i>a</i>			<i>ɑ</i>

The vowels *ü*, *ö*, *u* and *o* are strongly labial. The illabial back vowel *õ* may be optionally closer than the other mid vowels; the illabial front vowel *ä* may be optionally even more open than the illabial back vowel *a*.

In primarily stressed initial syllables of native words Standard Estonian has short and long monophthongs of all nine qualities, cf. Table 9; the duration of long vowels varies with Q2 and Q3 and consonantal environment from underlong to extra long, cf. Tables 2.1 and 3.1, 2.2 and 3.2, 5 and 6 vs. 7. In non-first syllables of native words four short vowels occur; the duration of short vowels in open post-tonic syllables is to a certain extent inversely proportional to the duration of the preceding stressed syllable, being longest and considerably longer than the short vowel in a syllable of Q1 and shortest after a syllable of Q3, cf. Tables 2.1 and 3.1.

**Table 9.** Monophthongs in first and non-first syllables

First syllable					Non-first syllable		
Short			Long				
<i>i</i>	<i>ü</i>	<i>u</i>	<i>ii</i>	<i>üü</i>	<i>uu</i>	<i>i</i>	<i>u</i>
<i>e</i>	<i>õ</i>	<i>ō</i>	<i>o</i>	<i>ee</i>	<i>öö</i>	<i>õõ</i>	<i>oo</i>
<i>ä</i>	<i>a</i>		<i>ää</i>	<i>aa</i>		<i>a</i>	

It is recommended that the orthographical sequence *üü* should be pronounced not as a long monophthong but as the diphthong [üi] when directly followed by a vowel *a*, *e* or *u* (cf. *süüa* [süija] ‘to eat’, *süües* [süijes] ‘while eating’).

### 2.2.2. Diphthongs

Diphthongs of the initial syllable in Standard Estonian end in *i*, *e*, *a*, *o*, *u*. Despite the occurrence of similar patterns with long monophthongs, several diphthongs ending in *e*, *a* and *o* do not occur in syllables of Q2, cf. Table 10. As a rule, such diphthongs have arisen from vowel contraction after the loss of an intervocalic stop. In Table 10, the diphthong *üi* stands also for the orthographical sequence *üü* in triplets *üüa*, *üüe* and *üüu* (e.g. *müüa* [müija] ‘to sell’, *püüab* [püijab] ‘he catches’, *hüüu* [(h)üiju] ‘of a loud shout (GSg)’); otherwise this diphthong occurs only in the borrowing *süit* ‘suite’ : GSg *süidi*, and as an example of orthographical inconsistency in the noun *rüüu* [rüiju] ‘hand-woven rug of a certain type’

In non-first syllables of native words, only the diphthongs *ei*, *ai* and *ui* occur; in such cases *i* is either a pluralizer (‘*aastaid* ‘years (PPl)’, *võõrai* ‘legi ‘even to strangers (AllPl)’, *südameid* ‘hearts (PPl)’, *sõdu reile* ‘to soldiers (AllPl)’) or belongs to the superlative suffix *-im* (‘*kõrgeim* ‘the highest’, *õnnetuim* ‘the unhappiest’ : GSg *õnne’tuima*, *kaunei’maile* ‘to the most beautiful ones (AllPl)’). A diphthong can occur in the second syllable of a

foot only if the preceding syllable is of Q3 and carries the primary stress. A diphthong can occur in the third syllable of a foot only if the syllable is word-final ('*kauneimaid* 'the most beautiful ones (PPl)').

**Table 10.** Standard Estonian long monophthongs and diphthongs

	<i>I</i>	<i>e</i>	<i>ä</i>	<i>õ</i>	<i>ü</i>	<i>õ</i>	<i>a</i>	<i>o</i>	<i>u</i>
<i>i</i>	<i>ii</i> <sup>2</sup>	( <i>ie</i> )					( <i>ia</i> )	( <i>io</i> )	<i>iu</i> <sup>2</sup>
<i>e</i>	<i>ei</i> <sup>2</sup>	<i>ee</i> <sup>2</sup>					<i>ea</i> <sup>2</sup>	<i>eo</i>	( <i>eu</i> <sup>2</sup> )
<i>ä</i>	<i>äi</i> <sup>2</sup>	<i>äe</i> <sup>2</sup>	<i>ää</i> <sup>2</sup>					<i>äo</i>	<i>äu</i> <sup>2</sup>
<i>õ</i>	<i>õi</i> <sup>2</sup>	<i>õe</i>		<i>öö</i> <sup>2</sup>			<i>õa</i>		
<i>ü</i>	<i>üi</i> <sup>2</sup>	( <i>üe</i> )			<i>üü</i> <sup>2</sup>		( <i>üa</i> )	( <i>üo</i> )	
<i>õ</i>	<i>õi</i> <sup>2</sup>	<i>õe</i>				<i>õõ</i> <sup>2</sup>	<i>õa</i>		<i>õu</i> <sup>2</sup>
<i>a</i>	<i>ai</i> <sup>2</sup>	<i>ae</i> <sup>2</sup>					<i>aa</i> <sup>2</sup>	<i>ao</i>	<i>au</i> <sup>2</sup>
<i>o</i>	<i>oi</i> <sup>2</sup>	<i>oe</i> <sup>2</sup>					<i>oa</i>	<i>oo</i> <sup>2</sup>	<i>ou</i> <sup>2</sup>
<i>u</i>	<i>ui</i> <sup>2</sup>	( <i>ue</i> )					( <i>ua</i> )	( <i>uo</i> )	<i>uu</i> <sup>2</sup>

**Note.** The superscript number 2 indicates that the sequence occurs in addition to syllables of Q3 also in syllables of Q2. Diphthongs that occur only in borrowings are in parentheses.

2.3. Consonants

Standard Estonian has consonants of eighteen phonemic qualities, cf. Table 11.

**Table 11.** Consonant qualities in Standard Estonian

	Labial	Labio-dental	Dental	Palatal-ized	Post-alveolar	Palatal	Velar	Laryn-geal
Stops	<i>p</i> <i>B</i>		<i>t</i> <i>D</i>	<i>tʲ</i> <i>ǂ</i>			<i>k</i> <i>G</i>	
Nasals	<i>m</i>		<i>n</i>	<i>nʲ</i>			<i>ŋ</i>	
Laterals			<i>l</i>	<i>lʲ</i>				
Trills			<i>r</i>					
Sibilants			<i>s</i> <i>Z</i>	<i>sʲ</i> <i>ž</i>	<i>š</i> <i>ž</i>			
Spirants		<i>f</i>						<i>h</i>
Semivowels		<i>v</i>				<i>j</i>		

The orthography does not distinguish the palatalized dentals (or denti-alveolars) from the unpalatalized ones, and the velar nasal *ŋ* from <n> In Standard Estonian the palatalized dentals are characteristically prepalatalized, i.e. the palatalization concerns only the initial part of the consonant and usually there is an *i*-coloured transition between the consonant and the preced-

ing vowel. Thus, the FUPA standard notation is somewhat misleading at least for [t] and [l]; the IPA notation is systematically even less adequate.

Dentals are palatalized after a vowel, different from *i*, of the primarily stressed syllable, (a) in disyllabic *i*-stems and their derivatives (even in the forms that exhibit no *i*: *kott* [ko·t̪] 'sack', GSg *koti* [ko·t̪i], PSg *kotti* [ko·t̪ti], PPl *kotte* [ko·t̪te]), (b) if there is an *i* in the second syllable (*tunnis tama* [tu·ñnista:ma] 'to witness'), (c) in the monosyllabic nominative singular forms of most disyllabic nominal *e*-stems (*sõlm* [se·l̪m] 'knot', GSg *sõlme* [se·l̪mè], PSg *sõlme* [se·l̪me]) and (d) in several diminutive or pejorative words (*notsu* 'piggy' [no·t̪sù], *molkus* 'bastard' [mo·l̪kkuz]).

The nasal *ŋ* occurs in Standard Estonian only before a homorganic single or geminate stop that belongs to the same stem or derivational morpheme.

A stop can be preceded in a morpheme only by a homorganic nasal; *m*, *n* and *ŋ* before the velar stop are a sign that the velar stop stands at the beginning of a new morpheme.

Long intervocalic and long postvocalic final consonants are written double in syllables of both Q2 and Q3, except long intervocalic stops and long *š* (1) in syllables of Q2 and (2) after a vowel other than a short monophthong.

The short and weak voiceless stops are written with <b d g>. Single short stops and sibilants are weak in voiced environments, i.e. when preceded and followed by vowels or resonant consonants, and in word-final positions when preceded by a vowel or a resonant consonant. Single stops and sibilants are strong when word-initial or when followed or preceded by another stop or sibilant or a spirant.

In view of quantity contrasts such as *saag* vs. *saak* (Table 2.1), *laug* vs. *lauk* (Table 4.1), *adra* vs. *nitro* (Table 6), *kord* vs. *tort* (Table 7.1) *aus* 'honest' vs. *kauss* 'bowl', *vars* 'stalk; shaft' vs. *varss* 'foal', consonant length is phonemic on the segment level. Geminates are long consonants that are divided between two syllables.

### 2.3.1. Consonant clusters

Consonant clusters in Estonian consist of two to five consonants. Most clusters occur only after vowels of primarily stressed syllables. The occurrence of certain clusters depends on the preceding a long or short vowel or vowel sequence and on syllable quantity. Clusters beginning with weak voiceless stops *b*, *d*, or *g* never follow a short vowel of a syllable of Q3. Several clusters, e.g. clusters of two consonants ending in a resonant and preceded by a long vowel or diphthong, all clusters of three consonants ending in a resonant, and all clusters with *s* after a weak stop always contain a morpheme

**Table 12.** Monomorphemic clusters of two consonants  
after the vowel of the initial syllable in native  
and adapted Standard Estonian stems

	<i>b</i>	<i>d</i>	<i>g</i>	<i>p</i>	<i>t</i>	<i>k</i>	<i>s(s)</i>	<i>m</i>	<i>n</i>	<i>l</i>	<i>r</i>	<i>v</i>	<i>j</i>
<i>b</i>										<i>bl</i>	<i>br</i>		<i>bj</i>
<i>d</i>											<i>dr</i>	<i>dv</i>	<i>dj</i>
<i>g</i>								<i>gn</i>		<i>gl</i>	<i>gr</i>	<i>gv</i>	
<i>p</i>				<i>pt</i>			<i>ps</i>			<i>pl</i>	<i>pr</i>		<i>pj</i>
<i>t</i>					<i>tk</i>		<i>ts</i>			<i>tl</i>	<i>tr</i>	<i>tv</i>	<i>tj</i>
<i>k</i>							<i>ks</i>	<i>kn</i>		<i>kl</i>	<i>kr</i>		<i>kj</i>
<i>s</i>				<i>st</i>	<i>sk</i>			<i>sn</i>		<i>sl</i>	<i>sr</i>	<i>sv</i>	<i>sj</i>
<i>h</i>				<i>ht</i>	<i>hk</i>			<i>hm</i>	<i>hn</i>	<i>hl</i>	<i>hr</i>	<i>hv</i>	<i>hj</i>
<i>m</i>	<i>mb</i>			<i>mp</i>			<i>ms(s)</i>		<i>mn</i>	<i>ml</i>	<i>mr</i>		
<i>n</i>		<i>nd</i>	<i>ng</i>		<i>nt</i>	<i>nk</i>	<i>ns(s)</i>			<i>nl</i>	<i>nr</i>		
<i>l</i>	<i>lb</i>	<i>ld</i>	<i>lg</i>	<i>lp</i>	<i>lt</i>	<i>lk</i>	<i>ls(s)</i>	<i>lm</i>			<i>lr</i>	<i>lv</i>	<i>lj</i>
<i>r</i>	<i>rb</i>	<i>rd</i>	<i>rg</i>	<i>rp</i>	<i>rt</i>	<i>rk</i>	<i>rs(s)</i>	<i>rm</i>	<i>rn</i>	<i>rl</i>		<i>rv</i>	<i>rj</i>
<i>v</i>										<i>vl</i>	<i>vr</i>		

**Key:** The non-italicized clusters result from active morphophonological apocope in synchronically simple word stems, clusters occurring only on synchronical morpheme boundaries are not taken into account. The letters in parentheses reflect the writing of the corresponding clusters with double *ss* in Q3 when following a short monophthong.

**Table 13.** Monomorphemic clusters of three consonants  
after the vowel of the initial syllable in native  
and adapted Standard Estonian stems

			<i>psl</i> <i>ksl</i>			
		<i>spl</i>	<i>stl</i>	<i>skl</i>		
		<i>htl</i>	<i>hkl</i>		<i>hvl</i>	
<i>mps</i>		<i>mpl</i>		<i>mb</i>	<i>mpr</i>	<i>mbr</i>
<i>nts</i>	<i>nks</i>		<i>ntl</i>	<i>ndl</i>	<i>ntr</i>	<i>ndr</i>
			<i>nkl</i>	<i>ngl</i>	<i>nkr</i>	<i>ldr</i>
<i>lps</i>	<i>lts</i>	<i>lks</i>	<i>lst</i>		<i>ltr</i>	<i>lbr</i>
	<i>rts</i>	<i>rks</i>	<i>rst</i>	<i>rsk</i>		<i>rbr</i>
		<i>rtl</i>	<i>rkl</i>	<i>rbl</i>	<i>rdl</i>	<i>rgl</i>

**Key:** The non-italicized clusters result from active morphophonological apocope in synchronically simple word stems, clusters occurring only on synchronical morpheme boundaries are not taken into account.

boundary or result from vowel syncope (*'küünlad* 'candles', cf. *'küünal* 'candle'; *'kaablid* 'cables', cf. *'kaabel* 'cable'; *vaidlen* 'I debate', cf. Inf *vaielda*; *võrdlen* 'I compare', cf. Inf. *võrrelda*; *'kuldne* 'golden' : GSg *'kuldse*), cf. 2.4.3.

Table 12 presents monomorphemic clusters after the vowel of the initial syllable. In a morpheme, *v* and *j* never occur as the first component of a cluster, and *h* never occurs as the last component of a cluster; stops characteristically follow only homorganic nasals (*g* and *k* follow [*ŋ*]) and do not precede nasals; the single existing cluster *kn* results from syncope in a borrowing. Monomorphemic clusters of three consonants begin with a resonant consonant and have either a stop as their second and *s* as the third component or *s* as their second and a stop as the third component, cf. Table 13.

## 2.4. Morphophonological alternations

Estonian as a language of the flecational type has numerous morphophonological alternations most of which occur only in a restricted set of stems.

### 2.4.1. Gradation

Gradation in Estonian includes a set of stem alternations that occur in stressed syllables or at the beginning of post-tonic syllables when the word is inflected, namely (a) quantity alternation of long stressed syllables whereby Q3 in the strong grade alternates with Q2 in the weak grade, and (b) quality alternation that results from the weakening of former stops.

Quantity alternation includes (a) the orthographical alternations <*p* : *b*>, <*t* : *d*>, <*k* : *g*>, <*ss* : *s*> after a long vowel or a diphthong or after or before a resonant (cf. *'saak* 'yield, prey, plunder', PSg *saaki* : GSg *saagi* in Table 2.1, *'lauk* 'leek', PSg *'lauku* : GSg *'laugu* in Table 4.1; *'tort* 'cake', PSg *torti* GSg *tordi* and *poort* 'border of a fabric or rug', PSg *poorti* GSg *poordi* in Table 7.1, *atra* 'plough (PSg)' : GSg *adra* in Table 6; cf. also types W1, S1, W2 and S2 in Table 14), (b) the orthographical alternations <*pp* *p*>, <*tt* : *t*>, <*kk* : *k*>, <*šš* *š*> after a short vowel (note that intervocalic <*p*>, <*t*>, <*k*> and <*š*> after a vowel of a stressed syllable of Q2 render short geminates [*pp*], [*tt*], [*kk*], [*šš*], cf. *sakk* 'jag', PSg *sakki* : GSg *saki* in Table 2.1 and types W3 and S3 in Table 14), and (c) cases where the alternation of Q3 and Q2 is not reflected in conventional orthography (cf. *linn* 'town, city', PSg *linna* : GSg *'linna* and *viin* 'vodka', PSg *viina* : GSg *viina* in Table 3.1, *varn* 'peg, rack', PSg *'varna* GSg *varna* in Table 5; *poord* 'ship-

board', PSg *poordi* GSg *poordi* in Table 7.1; cf. also types W4, S4 and S7 in Table 14).

Quality alternation is reflected in the modern language mostly as mutation, assimilation, or loss in the weak grade of the initial single obstruent of the second syllable *b*, *d*, *g*, *s*, *t*, or *k* (here *t* and *k* occur in the strong grade only after the consonants *s* and *h*). Quality alternation is most regular after long initial syllables where it most clearly includes (a) mutations represented by the alternations *b* : *v* and *g* : *j* (types W5 and S5 in Table 14), (b) assimilative alternations *mb* : *mm*, *nd* : *nn*, *ld* : *ll*, *rd* : *rr* after a short monophthong (types W7 and S6), and (c) loss of *b*, *d*, *g*, *t*, and *k* in the weak grade (the losses do not affect the number of stem syllables in weak-grade forms of types W7, W8, and S8 and trigger contraction in types W9 and S9). Quality alternation after short initial syllables includes wholly lexicalized forms; for nominals and verbs with a disyllabic stem in the partitive singular and infinitive, the alternation includes mutations *b* : *v* and *d* : *j* (type W9) and loss of *b*, *d*, and *g* (type W10).

Gradation of nominals with a monosyllabic partitive singular form ending in *-tt* or *-t* and either a disyllabic genitive form of Q2 or a monosyllabic genitive form (types W12–17) is discussed in 2.4.1.1.

#### 2.4.1.1. Weakening and strengthening gradation

According to the Estonian grammatical tradition, which follows the example of historical grammar, gradational stems are divided into weakening and strengthening stems on the basis of the distribution of the strong- and weak-grade forms in the partitive and/or nominative singular versus the genitive singular for nominals and the supine illative versus the first person singular of the present indicative. Partitive plural forms of nominals and imperfect 3Sg and supine illative forms of verbs are in the strong grade both for weakening and strengthening gradation. This classification works well for the weakening types with disyllabic partitive singular forms and for all strengthening types, cf. types W1–W11 and S1–S9 in Table 14, where types W1–W17 represent the main types of weakening gradation and S1–S9 represent types of strengthening gradation. For weakening types with monosyllabic partitive singular forms that are marked with the case ending *-tt* (after a short monophthong) or *-t* (elsewhere), cf. types W12–W17, there are some unsolvable problems with the identification of the strong-grade stems in W17 and similar minor problems in W13–W16.

In modern grammars, the nominative singular is presented as the critical form instead of the partitive. In that case type W12 represents quantity alter-

**Table 14.** Weakening and strengthening gradation

	NSg	PSg	GSg	PPl	Gloss	Infinitive	1Sg	Gloss
W1	'oder	'otra	'odra	'otri	'barley'			
	'padi	'patja	'padja	'patju	'pillow'			
W2	'laat	'laata	'laada	'laatu	'fair, market'	'saata	'saadab	'to send'
	'välk	'välku	'välgu	'välke	'lightning'	'märkida	'märgib	'to mark'
W3	'lipp	'lippu	'lipu	'lippe	'flag'	'uppuda	'upub	'to be drown'
W4	'koor	'koori	'koori	'koore	'choir'	'veerida	'veerib	'to spell'
	'oks	'oksa	'oksa	'oksi	'branch'	'otsida	'otsib	'to seek'
	'vill	'villa	'villa	'villu	'wool'	'sallida	'sallib	'to tolerate'
W5	'härg	'härge	'härja	'härge	'ox'			
W6	'kand	'kanda	'kanna	'kandu	'heel'	'anda	'annab	'to give'
W7	'keeld	'keeldu	'keelu	'keelde	'prohibition'	'küündida	'küünib	'to reach'
	'lõug	'lõuga	'lõua	'lõugu	'jaw'	'püüda	'püüab	'to catch'
W8	'koht	'kohta	'koha	'kohti	'place'	'käskida	'käsib	'to order'
	'jalg	'jalga	'jala	'jalgu	'foot'	'sulgeda	'suleb	'to close'
	'aeg	'aega	'aja	'aegu	'time'			
W9	'laug	'laugu	'lau	'lauge	'eyelid'	'näuguda	'näub	'to meow'
	'roog	'roogu	'roo	'rooge	'reed'			
	'saag	'saagi	'sae	'saage	'saw'	'saagida	'saeb	'to saw'
W10	'sada	'sada	'saja	'sadu	'hundred'	'sadada	'sajab	'to rain'
	'tõbi	'tõbe	'tõve	'tõbesid	'disease'			
W11	'nägu	'nägu	'näo	'nägusid	'face'	'siduda	'seon	'to tie'
	'uba	'uba	'oa	'ube	'bean'	'põdeda	'põen	'suffer'
	'sugu	'sugu	'soo	'sugusid	'kin'	'kududa	'koob	'to knit'
W12	'keel	'keelt	'keele	'keeli	'tongue'			
W13	'vars	'vart	'varre	'varsi	'stalk; shaft'			
W14	'õõs	'õõnt	'õõne	'õõsi	'cavity'			
W15	'uus	'uut	'uue	'uusi	'new'			
W16	'käsi	'kätt	'käte	'käsi	'hand'			
W17	'üks	'üht	'ühe	'ühtesid	'one'			
S1	'kõblas	'kõblast	'kõpla	'kõplaid	'hoe'	'kedrata	'ketrab	'to spin'
S2	'tõuge	'tõuget	'tõuke	'tõukeid	'push'	'ärgata	'ärkab	'to wake up'
	'vaade	'vaadet	'vaate	'vaateid	'view, sight'	'vaadata	'vaatab	'to look'
S3	'hüpe	'hüpet	'hüppe	'hüppeid	'jump'	'hüpata	'hüppab	'to jump'
S4	'laine	'lainet	'laine	'laineid	'wave'	'kaevata	'kaevab	'to dig'
	'kallis	'kallist	'kalli	'kalleid	'expensive'	'kallata	'kallab	'to pour'
	'võti	'võtit	'võtme	'võtmeid	'key'	'kakelda	'kakleb	'to brawl'
S5	'tarve	'tarvet	'tarbe	'tarbeid	'need'	'kaevata	'kaebab	'to complain'
	'turvas	'turvast	'turba	'turbaid	'peat'	'peljata	'pelgab	'to fear'
S6	'vanne	'vannet	'vande	'vandeid	'oath'	'tõmmata	'tõmbab	'to pull'
	'sammal	'sammalt	'sambla	'samblaia	'moss'	'õmmelda	'õmbleb	'to sew'
S7	'kitsas	'kitsas	'kitsa	'kitsaid	'narrow'	'ekselda	'eksleb	'to roam'
	'palve	'palvet	'palve	'palveid	'request'	'arvata	'arvab	'to guess'
S8	'põial	'põialt	'põidla	'põidlaid	'thumb'	'vaielda	'vaidleb	'to debate'
	'tahe	'tahet	'tahte	'tahteid	'will'	'kohata	'kohtab	'to meet'
	'pale	'palet	'palge	'palgeid	'cheek'	'alata	'algab	'to begin'
S9	'loe	'loet	'loode	—	'north-west'			

nation, and types W13–W17, analogically to the weak-grade forms in types W6–W8 and W11, reflect weakening of the sibilant *s*, notably the assimilation by the preceding *r* after a short vowel (W16), loss after a consonant (W14–15), loss after a long vowel or diphthong (W15) and loss after a short syllable (W17). Still the plural partitive form *ühtesid* makes a strong argument for the underlying identity of the clusters *ks* and *ht* in paradigms of type W16, which suggests that the surface weakening of *s* actually goes back to the weakening of *d/t*. Anyway, the monosyllabic partitive singular forms in W12–W17 must be considered lexicalized exceptions whose quantity degree Q3 is the only cue for their strong grade.

Both quantity alternation and quality alternation produce weak-grade stems that can serve as well-formed nominal or verb forms, notably as genitive singular forms for the weakening gradation of nominals, the second-person singular forms of the imperative mood for the weakening gradation of verbs and the nominative singular forms for the strengthening gradation of nominals. The weak-grade stems of verbs under the strengthening gradation are always followed by a suffix that constitutes a whole syllable.

Due to the loss of secondary stress in the final syllables of a disyllabic or trisyllabic word and in syllables of Q1 or Q2 preceded by a syllable of Q3, cf. 2.1.5, the quantity alternation of the family of derivational suffixes ending in the nominative singular in *-ik* has been transformed depending on the preceding syllables either partially or entirely to the alternation of secondary stress in northern Estonia. In Table 15, there co-occur in the framework of the existing orthographical norms two types of quantity alternation for the family of derivational suffixes ending in the nominative singular in *-ik* if the suffixal syllable is preceded by the initial syllable of Q3 or by two syllables.

**Table 15.** Old and new quantity alternations caused by stress pattern changes: *petlik* ‘deceptive’ and *õnnelik* ‘happy’

	Old	New	Old	New
Nominative Sg	<i>pet'lik</i>	<i>petlik</i>	<i>õnne'lik</i>	<i>õnnelik</i>
Genitive Sg	<i>pet'liku</i>	<i>petliku</i>	<i>õnne'liku</i>	<i>õnne'liku</i>
Partitive Sg	<i>pet'likku</i>	<i>pet'likku</i>	<i>õnne'likku</i>	<i>õnne'likku</i>
Genitive Pl	<i>pet'likkude</i>	<i>pet'likkude</i>	<i>õnne'likkude</i>	<i>õnne'likkude</i>

### 2.4.2. Alternation *VC* : *CV* in the second syllable

The alternation *VC* : *CV*, or the alternative loss of the post-consonantal stem vowel and pre-consonantal vowel occurs (a) in words with strengthening gradation where *VC* occurs in the weak-grade stem, i.e. in the nominative and partitive singular and in the genitive plural, and *CV* occurs in the strong-grade stem:

NSg	PSg	GPl	GSg	PPl	
<i>ˈtutar</i>	<i>ˈtutart</i>	<i>ˈtutarde</i>	<i>ˈtütre</i>	<i>ˈtüt Reid</i>	ˈdaughter
<i>ˈaken</i>	<i>ˈakent</i>	<i>ˈakende</i>	<i>ˈakna</i>	<i>ˈaknaid</i>	ˈwindow

(b) in a set of words whose initial syllable is always of Q3, *VC* occurring only in the nominative singular stem of Q3:

NSg	PSg	GPl	GSg	PPl	
<i>ˈvanker</i>	<i>ˈvankrit</i>	<i>ˈvankrite</i>	<i>ˈvankri</i>	<i>ˈvank Reid</i>	ˈwagon
<i>ˈtähtis</i>	<i>ˈtähtsat</i>	<i>ˈtähtsate</i>	<i>ˈtähtsa</i>	<i>ˈtähtsaid</i>	ˈimportant

(c) in a set of words with *VC* occurring in the weak-grade stem in the nominative singular and only optionally in the partitive singular, and whose genitive plural is in Q3 and the nominative singular is of Q2 and has *VC*:

NSg	PSg	GPl	GSg	PPl	
<i>ˈsünnis</i>	<i>ˈsünnist ~ ˈsündsate</i>	<i>ˈsündsate</i>	<i>ˈsündsä</i>	<i>ˈsündsaid</i>	ˈappropriate
<i>ˈtõrges</i>	<i>ˈtõrgest ~ ˈtõrksate</i>	<i>ˈtõrksate</i>	<i>ˈtõrksa</i>	<i>ˈtõrksaid</i>	ˈreluctant

### 2.4.3. Stem-vowel alternation

In addition to alternations conditioned by apocope or syncope of a stem vowel, there occur stem-vowel alternations *i* : *e* and *u* : *o*.

Disyllabic nominals with a short first syllable have the stem vowel *i* in the nominative singular instead of the stem vowel *e*, which is present in most case forms in the singular, except the singular partitive that takes a consonantal stem, cf. *ˈtuli* ‘fire’ : GSg *ˈtule* : PSg *ˈtuld*; *ˈnimi* ‘name’ : GPSg *nime*; *ˈmägi* ‘hill’ : GSg *mäe* : PSg *mäge*.

For disyllabic stems with quality gradation the stem vowels *u* and, only after a long first syllable, *i* of the strong-grade forms alternate with the stem vowels *o* and *e* of those weak-grade forms that have lost the single stop *d* or *g*, cf. *ˈtigu* ‘snail’ : GSg *ˈteo*, *ˈtegu* ‘deed’ : GSg *ˈteo*, *ˈlugu* ‘story’ : GSg *ˈloo*, (*ˈpood* ‘shop’ :) PSg *ˈpoodi* : GSg *ˈpoe*, *ˈsaagida* ‘to saw’ : *ˈsaen* ‘I saw’

#### 2.4.4. Alternations *u : o, ü : ö* and *i : e*

Resulting from the loss of *b, d, and g* in weak-grade forms, the short close vowels *u, ü* and *i* of the first syllable open to mid vowels *o, ö* and *e* before *o, a* and *e*, e.g. *uba* ‘bean’ : *oad* ‘beans’, *pügada* ‘to cut the hair’ : *pöab* ‘cuts the hair’, *siduda* ‘to bind’ : *seon* ‘I bind’

#### 2.4.5. Vowel apocope and syncope

The stem vowel is apocopated in the nominative singular (a) in disyllabic nominal stems with a long first syllable and the weakening gradation, (b) after an intervocalic consonant in stems with strengthening gradation and (c) in most trisyllabic stems, cf. NSg *sepp* ‘smith’, PSg *seppa*, GSg *sepa*; NSg *ring* ‘circle’, PSg *ringi*, GSg *ringi*; NSg *jumal* ‘god’, PSg *jumalat*, GSg *jumala*.

The vowel of the second syllable is syncopated (a) in strong-grade forms of stems with strengthening gradation (*tütar* ‘daughter’ : GSg *tütre*, *küünal* ‘candle’ : GSg *küünla*, *katel* ‘boiler’ : GSg *katla*, *ainus* ‘single’ : GSg *ainsa*, *mõtelda* ‘to think’ : *mõtlen* ‘I think’; *kümme* ‘ten’ : GSg *kümne*; *kannel* ‘Estonian zither’ : *kandle*; *võidelda* ‘to fight’ : *võitlen* ‘I fight’) and (b) in all forms except the nominative singular of nominals that have a disyllabic stem of Q3 in the nominative singular that ends in a single resonant or, only in *a*-stems, in the sibilant *s*, cf. *kindel* ‘firm’ : GSg *kindla*; *ankur* ‘anchor’ : GSg *ankru*, *kahvel* ‘fork’ : GSg *kahvli*, *panter* ‘panther’ : GSg *pantri*; *tähtis* ‘important’ : GSg *tähtsa*. Several *i*-stem borrowings make exceptions of (b), e.g. *korter* ‘flat’ : GSg *korteri*, *kvartal* ‘city or wood quarter; a quarter of the year’ : GSg *kvartali*, *šaakal* ‘jackal’ : GSg *šaakali*.

#### 2.4.6. Alternation *m : n*

In some nouns, the bilabial nasal *m* alternates with *n* before suffixes beginning in the dental stop *d* or *t*, namely before the partitive singular case endings, e.g. *lumi* ‘snow’, GSg *lume* : *lund*; *leem* ‘broth’, GSg *leeme* : *leent*; (*süda* ‘heart’) : GSg *südame* : *südant*, and before the causative suffix *-da-*, cf. *suurem* ‘bigger; larger’ : *suuren* *dama* ‘to magnify, enlarge’

### 2.4.7. Alternation *j* : *i*

The semivowel *j* in *a*- and *u*-stems after consonants *b*, *d*, *l*, *r*, and *s* alternates with *i* at the end of the nominative singular form, e.g. *ori* 'slave' : GSg *orja*, PSg *orja*, *asi* 'thing' : GSg *asja*, PSg *asja*.

### 2.4.8. Alternation *ne* : *s(e)*

The suffix alternation *ne* (NSg) : *s(e)* occurs in nouns, adjectives, and in the ordinal numerals *esi'mene* 'first' and *teine* 'second'. The suffix *ne* is optionally dropped in the nominative singular after the suffix *-ke* (*'lūhi'kene* ~ *'lūhike* 'short'). Before the illative ending *-sse*, optional haplological syncope of *se* is frequent in the fourth syllable. It is somewhat less frequent in the third syllable if the initial syllable is of Q3, cf. 2.4.10. The occurrence of *se* vs. *s* in the partitive plural and adverbial plural cases depends on the number of syllables in the stem and on the quantity of the initial syllable, cf. Table 16.

**Table 16.** Alternation *ne* : *s(e)* and *se*-syncope

NSg	<i>'teine</i>	<i>naine</i>	<i>'jäine</i>	<i>punane</i>	<i>'üldine</i>	<i>'esi'mene</i>
GSg	<i>'teise</i>	<i>naise</i>	<i>'jäise</i>	<i>punase</i>	<i>'üldise</i>	<i>'esi'mese</i>
PSg	<i>'teist</i>	<i>'naist</i>	<i>'jäist</i>	<i>'punast</i>	<i>'üldist</i>	<i>'esimest</i>
IIISg-1		<i>'naissesse</i>	<i>'jäissesse</i>	<i>'puna'sesse</i>	<i>'üldi'sesse</i> <i>'üldisse</i>	<i>'esi'messesse</i> <i>'esi'messe</i>
IIISg-2	<i>'teise</i>					
NPI	<i>'teised</i>	<i>naised</i>	<i>'jäised</i>	<i>punased</i>	<i>'üldised</i>	<i>'esi'mesed</i>
GPI	<i>'teiste</i>	<i>naiste</i>	<i>'jäiste</i>	<i>punaste</i>	<i>'üldiste</i>	<i>'esi'meste</i>
PPI	<i>'teisi</i>	<i>naisi</i>	<i>'jäiseid</i>	<i>punaseid</i>	<i>'üldisi 'üldiseid</i>	<i>'esi'mesi</i>
IIIPi	<i>'teistesse</i>	<i>naistesse</i>	<i>'jäistesse</i> <i>'jäiseisse</i>	<i>punas'tesse</i> <i>'puna'seisse</i>	<i>'üldis'tesse</i> <i>'üldi'sisse</i> <i>'üldi'seisse</i>	<i>'esi'mestesse</i>

**Key:** *'teine* 'second; other' *naine* 'woman' *jäine* 'icy; frosty'; *punane* 'red' *'üldine* 'general, overall' *'esi'mene* 'first'

### 2.4.9. Gemination in illative

In disyllabic nominal stems with a short first syllable the intervocalic consonant is geminated in the short illative, cf. 3.1, e.g. *veri* 'blood' : *verre* 'into the blood', *udu* 'fog' : *uttu* 'into the fog', *maja* 'house' : *majja* 'into the house'

### 2.4.10. *se*-syncope in illative

A postvocalic stem-final *se*-sequence is optionally syncopated before the illative ending *-sse* in a trisyllabic stem of Q3 or in a tetrasyllabic stem, e.g. *rasku sesse* ~ *raskusse*, *'juma'lusesse* ~ *juma'lusse*, *'ini'mesesse* ~ *'ini'messe* from *raskus* 'difficulty', *'jumalus* 'deity', *'ini'mene* 'man, human being' Cf. Table 16.

## 3. Morphology

### 3.1. Morphological word classes

Words in Estonian belong to four main classes: (1) words that can be inflected for mood, time and person (verbs), (2) words that can be inflected for case, including for grammatical cases, i.e. nominative, genitive and partitive (nominals), (3) words that have no grammatical case forms (some adverb types and some adpositions), (4) words that have no inflectional forms (some adverb types and adpositions, conjunctions, interjections). As a rule, word inflection is a means of expressing syntactic relations between words with some general semantic properties. Because of important syntactic and semantic properties that often influence their inflection, nominals are classified into nouns, adjectives, numerals and pronouns. As restricted inflection is not the most important property of certain words, the classification of words that are both non-verbs and non-nominals into adverbs, adpositions, conjuncts and interjections is outside the scope of morphology.

### 3.2. Nominal inflection

In Estonian as elsewhere in Finnic, nominals, i.e. nouns, adjectives, numerals and pronouns are inflected for number and case.

Estonian has 14 nominal cases, both in singular and plural. Three of them are grammatical cases, namely nominative (N), genitive (G) and partitive (P), there are 11 adverbial cases, notably illative (Ill), inessive (Ine), elative (Ela), allative (All), adessive (Ade), ablative (Abl), translative (Trl), terminative (Ter), essive (Ess), abessive (Abe), comitative (Com). The adverbial cases fulfil the same tasks as prefixes or suffixes in many other languages.

Among the grammatical cases, nominative and partitive are cases of the subject, predicative, and object. Genitive is an object case or that of pre-noun modifiers.

The adverbial cases are mostly cases of adverbial, sometimes also of post-noun modifiers. Among other cases illative, inessive, and elative, i.e. the so-called interior local cases, express mostly relations in a closed space, cf. Table 17. Alongside the functions related to locality, elative and the so-called exterior local cases, i.e. allative, adessive, and ablative have also important functions that cannot be associated with locality.

**Table 17.** The system of adverbial cases

	Directional	Static	Separative
Interior	Illative ' <i>kivisse</i> 'into the stone'	Inessive ' <i>kivis</i> 'in the stone'	Elative ' <i>kivist</i> 'from the stone'
Exterior	Allative ' <i>kivile</i> 'onto the stone'	Adessive ' <i>kivil</i> 'on the stone'	Ablative ' <i>kivilt</i> 'off the stone'
Limited	Terminative ' <i>kivini</i> 'up to the stone'		
Existential	Translative ' <i>kiviks</i> 'into the state of being the stone'	Essive ' <i>kivina</i> 'as the stone'	
Instrumental		Comitative ' <i>kiviga</i> 'with the stone'	Abessive ' <i>kivita</i> 'without the stone'

Ten out of the eleven adverbial cases of Estonian (inessive, elative, allative, adessive, ablative, translative, terminative, essive, abessive and comitative) are always formed by adding a certain case ending to the genitive singular or genitive plural form.

Among the grammatical cases, the nominative singular (NSg) and genitive singular (GSg) are always unmarked, the partitive singular (PSg), partitive plural (PPl) and genitive plural (GPl) have several endings or, except the genitive plural, are unmarked, cf. Table 18.

A noun paradigm may contain case forms of different structures: (a) at least two case forms, the nominative and genitive singular, are morphologically unmarked, each representing a unity of a stem allomorph and its case function ('*naine* = 'woman&N', '*naise* = 'woman&G'; '*rind* = 'breast&N', '*rinna* = 'breast&G'; the symbol & denotes the unity of a stem and a case function); even many partitive singular forms of disyllabic nominal stems are morphologically unmarked, either being represented by a special case form ('*rinda* = 'breast&P') or constituting a syncretism of two or three case forms, usually of nominative and partitive ('*nägu* = 'face&NP', cf. '*näo* = 'face&G') or of nominative, genitive and partitive ('*maja* = 'house&NGP'),

**Table 18.** Case formatives

	Singular	<i>d</i> -Plural	<i>i</i> -Plural	Stem plural	<i>e</i> -Plural
Nominative (N)	–	<i>d</i>			
Genitive (G)	–	<i>te de</i>		–	<i>e</i>
Partitive (P)	<i>da tt t d Ø</i>	<i>sid</i>	<i>id</i>	–	
Illative-1 (Ill)	<i>sse</i>	<i>tesse desse</i>	<i>isse</i>		<i>esse</i>
Illative-2	<i>de ha he hu Ø</i>			<i>Ø</i>	
Inessive (Ine)	<i>s</i>	<i>tes des</i>	<i>is</i>	<i>s</i>	<i>es</i>
Elative (Ela)	<i>st</i>	<i>test dest</i>	<i>ist</i>	<i>st</i>	<i>est</i>
Allative (All)	<i>lle l</i>	<i>tele dele</i>	<i>ile</i>	<i>l</i>	<i>ele</i>
Adessive (Ade)	<i>l</i>	<i>tel del</i>	<i>il</i>	<i>l</i>	<i>el</i>
Ablative (Abl)	<i>lt</i>	<i>telt delt</i>	<i>ilt</i>	<i>lt</i>	<i>elt</i>
Translative (Trl)	<i>ks</i>	<i>teks deks</i>	<i>iks</i>	<i>ks</i>	<i>eks</i>
Terminative (Ter)	<i>ni</i>	<i>teni deni</i>	<i>ini</i>	<i>ni</i>	
Essive (Ess)	<i>na</i>	<i>tena dena</i>	<i>ina</i>	<i>na</i>	
Abessive (Abe)	<i>ta</i>	<i>teta deta</i>	<i>ita</i>	<i>ta</i>	<i>eta</i>
Comitative (Com)	<i>ga</i>	<i>tega dega</i>	<i>iga</i>	<i>ga</i>	<i>ega</i>

**Key:** A dash (–) indicates that the case form has no grammatical marker. Ø indicates that under certain conditions the case form is unmarked (has a zero allomorph). A cell is empty if a case form is absent in the plural type.

and (b) case forms that represent sequences of a stem and case and/or number suffix allomorphs (*'naise.le* = 'woman.All', *nais.te.le* = 'woman.Pl.All').

The plural formation in Estonian depends largely on the grammatical case. Except certain pronouns, all other nominals have the characteristic pluralizer *-d* in the nominative case. Elsewhere plurality is expressed either by a pluralizer (SUFFIXAL PLURAL) or by a modification of the stem vowel (STEM PLURAL). In Table 18, the pluralizers are divided between four plural paradigms: the *d*-plural, *i*-plural, stem plural and *e*-plural. The absence of a case form in a plural paradigm does not mean the general absence of the corresponding case form in a nominal paradigm: instead of the non-existing case form in one plural paradigm the corresponding case form in another paradigm is used. A nominal may have 1–2 plural genitive and plural partitive forms and 1–3 forms of some adverbial cases. As a rule, the *d*-plural can be formed for most nominals, still in certain word types only the plural partitive forms in *-id* are possible, and in many cases the stylistic value of stem plural forms of the plural partitive is considered higher than those with *-sid*. The stylistic value of different forms of the four plural paradigms depends on the case and the individual word. As a rule, the adverbial case forms of the *i*-plural,

stem plural, and *e*-plural are used mostly for brevity or better rhythm. The adverbial case forms of the *i*-plural and the stem plural, as the historically earlier ones, have often retained their place in phraseology.

Characteristically, adjectives and numerals as attributes agree with their head nouns in case, and adjectives and ordinal numerals also in number, except when the noun is in the terminative, essive, abessive, or comitative. In the latter cases the adjective or the numeral is in the genitive. An adjective or a numeral takes the terminative, abessive, or comitative form only when occurring as the head of a noun phrase.

### 3.2.1. Pluralizers

In Estonian, plural formation depends largely on the case type. The case forms belong to the following four case types based on plural formation.

- (1) All nominals, except some pronouns, have the characteristic pluralizer *-d* in the nominative case.
- (2) In the genitive case the pluralizers *-de*, *-te*, and, rarely, *-e* and the stem plural are used.
- (3) In the partitive case the pluralizers *-si*-, *-i*- and the stem plural are used.
- (4) In adverbial cases the pluralizers *-de*-, *-te*-, *-i*-, *-e*- and the stem plural are used.

In Table 18, the plural formation is divided between four plural paradigms: the *d*-plural, *i*-plural, stem plural, and *e*-plural. Note that there exists a long tradition to refer to all forms with *-de(-)* or *-te(-)* as *de*-plural; the *de*-plural includes all *d*-plural forms except the nominative plural form.

The pluralizers *-de(-)* and *-te(-)* in genitive and adverbial case forms are mutually exclusive. The pluralizer *-de* occurs with monosyllabic vocalic stems (*'puude* from *'puu* 'tree', *'täide* from *'täi* 'louse'), disyllabic vocalic stems of Q1 or Q2 (*'majade* from *'maja* 'house'), disyllabic vocalic strong-grade stems of words with weakening gradation (*'jalgade* from *'jalg* 'foot', *'riikide* from *'riik* 'state'), words having a disyllabic gradational suffix (*'kirja nikkude* from *'kirjanik* 'writer'), and disyllabic consonantal weak-grade stems ending in *l*, *n*, and *r* of words with strengthening gradation (*'tütarde* from *'tütar* 'daughter'). The pluralizer *-te* occurs with trisyllabic vocalic stems (*'jumalate* from *'jumal* 'god', *'kunin gate* from *'kuningas* 'king'), words with weakening gradation having a monosyllabic stem in the partitive singular and genitive plural, cf. Table 14, types W12–W17 (*'keelte* from *'keel* 'tongue; language', *'õite* from *'õis* 'blossom'), and with most words with strengthening grada-

tion ('*liikmete* from '*liige* 'member', '*mõtete* from '*mõte* 'thought'), after *s* ('*sõrmuste* from '*sõrmus* 'ring', '*vaeste* from '*vaene* 'poor').

The pluralizer *-e* in the genitive and adverbial case forms is used with a few *a*-stems: '*jalge* from '*jalg* 'foot' (cf. PSg '*jalga*'), '*silme* from '*sil*m 'eye', '*rinde* from '*rind* 'breast'

The pluralizer *-si-* is always followed by the partitive ending *-d*. It occurs with (a) monosyllabic vocalic stems containing a diphthong ending in *i*, the long vowels *ii* and *üü* ('*täisid* from '*täi* 'louse') and is permitted for all other stems of the type, (b) all *e-* and *u-*stems of Q1 and Q2, (c) all gradationless *a-* and *i-*stems of Q2. In addition, it is considered as possible from all words with weakening gradation having in the strong grade a long initial syllable, except for words of types W12–17 in Table 14.

The pluralizer *-i-* is preceded by the stem vowel and is always followed by a case ending. It occurs with (a) monosyllabic vocalic stems containing a long vowel different from *ii* and *üü* ('*suid* from '*suu* 'mouth'), (b) all trisyllabic stems ('*kuningaid* from '*kuningas* 'king'), (c) words with strengthening gradation ('*tütteid* from '*tütar* 'daughter'), (d) with disyllabic words of Q3 alternating *ne se* after the initial syllable ('*vaeseid* from '*vaene* 'poor').

The *de*-plural is the only type of plural for nominals ending in *-sid* in the plural partitive ('*suvi* 'summer', PPl '*suvesid* and GPl '*suvede*; '*kõri* 'throat', PPl '*kõrisid* and GPl '*kõride*; '*idu* 'germ', PPl '*idusid* and GPl '*idude*).

For some *a*-stems, *e*-plural is possible; the *e*-plural is based on the plural genitive ending in *-e*; historically such plural genitive forms come from forms ending in *-de*.

Modern Estonian has retained a few relics of the dialectal *a*-plural that was used by some authors up to the 1910s. Anyway such forms as '*püksata* 'without pants (Abe)', '*võrgale* 'to fishing with nets (All)' : '*võrgal* '[to be] fishing with nets (Ade)' '*võrgalt* 'from fishing with nets' are nowadays hardly recognizable as plural forms of the words '*püksid* 'pants' and '*võrgud* 'nets'

The different ways of plural formation have a different stylistic value, and especially the stem plural is subject to several restrictions because of complicated alternations and homonymy. *e*-plural forms are used only in some collocations and, as substitutes of *d*-plural forms, in poetry when a syllable needs to be saved. In orthological dictionaries, however, only a few *e*-plural forms of '*jalg* 'foot; leg', '*rind* 'breast' and '*sil*m 'eye' are accepted and labelled as adverbs.

### 3.2.2. Plural stem formation

The so-called stem plural is possible for a set of disyllabic vocalic stems with a short first syllable or with weakening gradation. In such cases the stem vowel is replaced by another vowel mostly in the partitive plural and more rarely in other plural case forms according to the following scheme:

- u > e*, cf. *võrk* 'net', PSg *võrku*, PPl *võrke*;
- i > e*, cf. *värv* 'color', PSg *värvi*, PPl *värve*;
- e > i*, cf. *järv* 'lake', PSg *järve*, PPl *järvi*;
- a > e* after *j* and *i* if there is *o*, *u*, or *ü* in the first syllable or if there is *o* or *u* in the preceding short syllable, cf. *ori* 'slave', PSg *orja*, PPl *orje*; *nui* 'club', PSg *nuia*, PPl *nuie*; *tühi* 'empty', PSg *tühja*, PPl *tühje*; *muna* 'egg', PPl *mune*;
- a > i* if there is *e(e)*, *ä(ä)*, *ö(ö)*, or *ü* in the initial syllable (*'kena* 'nice', PPl *'keni*; *'härg* 'ox', PSg *'härğa*, PPl *'härgi*; *'külĹm* 'cold', PSg *'külĹma*, PPl *'külĹmi*), *o(o)* or *u(u)* in the long initial syllable (*'koer* 'dog', PSg *'koera*, PPl *'koeri*; *suund* 'direction', PSg *suunda*, PPl *suundi*) and in three stems with a short *i* in the initial syllable (*'pikk* 'long', PSg *'pikka*, PPl *'pikki*; *silm* 'eye', PSg *silma*, PPl *silmi*; *'king* 'shoe', PSg *'kinga*, PPl *kingi*);
- a > u* if there is *a(a)*, *i(i)*, *õ(õ)*, *ei*, or *äi* in the first syllable (*'kala* 'fish', PPl *'kalu*; *vaal* 'whale', PSg *vaala*, PPl *vaalu*; *'hind* 'price', PSg *'hinda*, PPl *'hindu*; *piin* 'torture', PSg *piina*, PPl *piinu*; *sõda* 'war', PPl *sõdu*; *mõõk* 'sword', PSg *mõõka*, PPl *mõõku*; *'leib* 'bread', PSg *'leiba*, PPl *'leibu*; *väin* 'strait', PSg *väina*, PPl *väinu*) and after *lj* if there is *e* or *ä* in the first syllable (*'neli* 'four', PSg *nelja*, PPl *nelju*; *väli* 'field', PSg *välja*, PPl *välju*).

In monosyllabic vocalic stems ending in a long monophthong, except *üü* or *ii*, the long monophthong is shortened before the pluralizer *i*, e.g. *puu* 'tree' PPl *puid*, *soo* 'mire' PPl *soid*, *töö* 'work' PPl *tõid*, *i'dee* 'idea' : PPl *i'deid*.

The stem plural, i.e. the modified stem vowel, is used in the genitive exclusively with the so-called gradational *ik*-suffixes that in all singular cases, except the nominative case, exhibit the stem vowel *u* (*'kirja nike* from *'kirjanik* 'writer', cf. GSg *'kirja niku*, PSg *'kirja nikku*; *ämblike* from *ämblik* 'spider', cf. PSg *ämb'likku*). Unlike genitive plural forms marked with suffixal pluralizers, the stem plural genitive forms of words with weakening gradation are weak-grade words.

## 3.2.3. Case formation

Nominative, genitive, partitive, and illative-1 forms are often distinguished only by stem alternations that also can be present in morphologically marked case forms. Note that a noun can have from one to six stem allomorphs. The interrelation between stem allomorphs in a paradigm depends also on whether the stem is subject to weakening or the strengthening gradation, cf. Tables 19 and 20.

Case endings in the genitive plural, partitive singular and plural, illative-2 and allative singular depend largely on the stem or word type.

**Table 19.** Interrelations between case forms of weakening stems: *jalg* 'foot'

	Singular	de-Plural	Stem plural	e-Plural
Nominative	<i>'jalg</i>	<i>'jala</i> <i>d</i>		
Partitive	<i>'jalga</i>	<i>'jalga</i> <i>sid</i>	<i>'jalu</i>	
Illative-2	<i>'jalga</i>		<i>'jalu</i>	
Genitive	<i>'jala</i>	<i>'jalga</i> <i>de</i>		<i>'jalg</i> <i>e</i>
Illative-1	<i>'jala</i> <i>sse</i>	<i>'jalga</i> <i>desse</i>	<i>'jalu</i> <i>sse</i>	<i>'jalg</i> <i>esse</i>
Inessive	<i>'jala</i> <i>s</i>	<i>'jalga</i> <i>des</i>	<i>'jalu</i> <i>s</i>	<i>'jalg</i> <i>es</i>
Elative	<i>'jala</i> <i>st</i>	<i>'jalga</i> <i>dest</i>	<i>'jalu</i> <i>st</i>	<i>'jalg</i> <i>est</i>
Allative	<i>'jala</i> <i>le</i>	<i>'jalga</i> <i>dele</i>	<i>'jalu</i> <i>le</i>	<i>'jalg</i> <i>ele</i>
Adessive	<i>'jala</i>	<i>'jalga</i> <i>dél</i>	<i>'jalu</i> <i>l</i>	<i>'jalg</i> <i>el</i>
Ablative	<i>'jala</i> <i>l</i>	<i>'jalga</i> <i>delt</i>	<i>'jalu</i> <i>lt</i>	<i>'jalg</i> <i>elt</i>
Translative	<i>'jala</i> <i>ks</i>	<i>'jalga</i> <i>deks</i>	<i>'jalu</i> <i>ks</i>	
Terminative	<i>'jala</i> <i>ni</i>	<i>'jalga</i> <i>deni</i>	<i>'jalu</i> <i>ni</i>	
Essive	<i>'jala</i> <i>na</i>	<i>'jalga</i> <i>dena</i>		
Abessive	<i>'jala</i> <i>ta</i>	<i>'jalga</i> <i>deta</i>	<i>'jalu</i> <i>ta</i>	
Comitative	<i>'jala</i> <i>ga</i>	<i>'jalga</i> <i>dega</i>		<i>'jalg</i> <i>ega</i>

**Table 20.** Interrelations between case forms of strengthening stems: *hammas* 'tooth'

	Singular	de-Plural	i-Plural	Stem plural
Nominative	'hammas	'hamba <i>d</i>		
Partitive	'hammas <i>t</i>		'hamba <i>id</i>	
Illative-2				'hambu
Genitive	'hamba	'hammas <i>te</i>		'hambu
Illative-1	'hamba <i>sse</i>	'hammas <i>tesse</i>	'hamba <i>isse</i>	'hambu <i>sse</i>
Inessive	'hamba <i>s</i>	'hammas <i>tes</i>	'hamba <i>is</i>	'hambu <i>s</i>
Elicative	'hamba <i>st</i>	'hammas <i>test</i>	'hamba <i>ist</i>	'hambu <i>st</i>
Allative	'hamba <i>le</i>	'hammas <i>tele</i>	'hamba <i>ile</i>	'hambu <i>le</i>
Adessive	'hamba	'hammas <i>tel</i>	'hamba <i>il</i>	'hambu <i>l</i>
Ablative	'hamba <i>l</i>	'hammas <i>telt</i>	'hamba <i>ilt</i>	'hambu <i>lt</i>
Translative	'hamba <i>ks</i>	'hammas <i>teks</i>	'hamba <i>iks</i>	
Terminative	'hamba <i>ni</i>	'hammas <i>teni</i>		'hambu <i>ni</i>
Essive	'hamba <i>na</i>	'hammas <i>tena</i>	'hamba <i>ina</i>	
Abessive	'hamba <i>ta</i>	'hammas <i>teta</i>		'hambu <i>ta</i>
Comitative	'hamba <i>ga</i>	'hammas <i>tega</i>		

## PARTITIVE SINGULAR

In the singular, the occurrence of different partitive case formatives depends to a great extent on the structure of the preceding stem.

- (1) *-da* occurs with monosyllabic pronominal stems ending in a short vowel ('*teda* 'him; her', '*seda* 'this', '*keda* 'who', '*mida* 'what'), cf. 3.5.4, 3.5.5.
- (2) *-tt* occurs with nouns having in the nominative a disyllabic stem ending in *-si* and in partitive a monosyllabic stem ending in a short vowel ('*vett* from '*vesi* 'water', '*sütt* from '*süsi* 'charcoal'), cf. Table 14, type W16.
- (3) *-t* occurs regularly (a) after a trisyllabic stem ('*jumalat* 'god', '*hõbedat* 'silver'); (b) after the stem of Q2 in words with strengthening gradation ('*mõtet* 'thought', '*tütart* 'daughter'), cf. Table 14, types S1–S9, and words having a disyllabic vocalic stem of Q2 both in the nominative and genitive singular ('*kiisut* 'kitty'); (c) after a stem of Q3 having both in nominative and genitive a disyllabic stem of Q3 ('*aastat*, cf. *aasta* 'year (NGSg)', *ankrut*, cf. *ankur* 'anchor (NSg)', GSg *ankru*); (d) after the monosyllabic stem of a set of words with weakening gradation having in the nomi-

native singular a monosyllabic stem ending in *n*, *l*, *r*, or *s* (*keelt* ‘tongue; language’), cf. Table 14, types W12–16. There are also several aberrant, historically motivated cases of *-t* after a disyllabic stem of Q1 (*õlut*, cf. *õlu* ‘beer’, GSg *õlle*; *südant*, cf. *süda* ‘heart (NSg)’, GSg *südame*) and there is a strong tendency to use otherwise meaningless proper names with a disyllabic stem of Q1 with the partitive ending *-t*.

- (4) *-d* follows a monosyllabic vocalic stem ending in a long vowel or a diphthong ending in *i* (*puud* ‘tree’, *täid* ‘louse’).
- (5) the partitive singular has no case formative after a disyllabic vocalic stem of Q1 (*kala* ‘fish (NGPSg)’, *nime* ‘name (GPSg)’, cf. NSg *nimi*), after a disyllabic vocalic stem of Q3 in words with weakening gradation (*riiki*, cf. NSg *riik* ‘state’, GSg *riigi*), after a monosyllabic vocalic stem containing a diphthong ending in *u* (*au* ‘honour (NGPSg)’, *nõu* ‘advice, counsel; container (NGPSg)’).

## ILLATIVE SINGULAR AND PLURAL

The illative case formation includes two parallel but fundamentally different morphological patterns, referred to as illative-1 and illative-2 in Tables 18, 19 and 20.

- (1) Longer illative forms with the ending *-sse* are formed similarly to all other adverbial cases. The ending *-sse* always follows a vowel: in the singular, a long vowel or a diphthong (*maasse* from *maa* ‘soil; land; country’), a vocalic weak-grade stem for the weakening gradation (*liivasse* from *liiv* ‘sand’, *keellesse* from *keel* ‘tongue; language’) and a vocalic strong-grade stem for the strengthening gradation (*põõsasse* from *põõsas* ‘bush’); in the plural the *d*-plural genitive stem (*jalga desse* from *jalg* ‘foot’, *keettesse* from *keel* ‘tongue; language’, *hammas tesse* from *hammas* ‘tooth’).
- (2) Other, shorter illative forms make a complementary set that does not cover all nominal types: (a) *-ha*, *-he*, and *-hu* follow monosyllabic vocalic stems ending in a short vowel; *-ha* occurs when the stem contains a long *aa* : *a* (*maha* from *maa* ‘soil; land; country’, cf. PPl *maid*), *-he* occurs when the stem contains *ea* : *ä* or *öö* : *ö* (*pähe* from *pea* ‘head’, cf. PPl *päid*; *öhe* from *öö* ‘night’, cf. PPl *öid*); *-hu* occurs if the stem contains *uu* : *u*, *oo* : *o* or *u* (*suhu* from *suu* ‘mouth’, cf. *suid*; *sohu* from *soo*, cf. PPl *soid*; *kuhu* ‘where to’, cf. *kust* ‘where from (Ela)’); (b) *-de* follows a monosyllabic stem ending in a long vowel, diphthong or the consonant *l*, *n*, *r* in a series of otherwise *e*-stem nominals with weakening gradation

(*'uude* from *'uus* 'new', *'täide* from *'täis* 'full', *'keelde* from *'keel* 'tongue; language', *'joonde* from *'joon* 'line', *'läände* from *'lääs* 'west', *'juurde* from *'juur* 'root'); (c) unmarked stem forms of three types serve as illative singular forms (i) for words with weakening gradation having a disyllabic strong-grade stem with a long initial syllable (*'jalga* from *'jalg* 'foot') or a geminated disyllabic stem form of Q3 for disyllabic words having otherwise a stem of Q1 (*'merre* from *meri* 'sea', GSg *mere*; *'tuppa* from *tuba* 'room (NPSg)'); (ii) for gradationless words with a trisyllabic vocalic stem (*'seminari* from *'seminar* 'seminar', GPSg *seminari*) or, rarely, a disyllabic vocalic stem of Q3 (*'põrgu* from *põrgu* 'hell (NGSg)'); (iii) rarely for words with strengthening gradation (*'taeva* from *'taevas* 'sky', GSg *taeva*).

The choice between illative-1 and illative-2 depends on the plural type: illative-1, i.e. *-sse* is used with *d*-, *i*-, and *e*-plural, with the stem plural only the morphologically unmarked illative-2 is used.

The use of forms of illative-1 and illative-2 is not entirely free. When a noun has in its paradigm both illative forms, the short form has a tendency to be substituted for the interrogative adverb *'kuhu* 'where to' whereas the corresponding long form can be substituted for the pronoun *millesse* 'in(to) what'. The choice of these two forms is not free but depends on the verb government. For example, it is possible to say *'lähen sõja väkke* 'I go into the army', *'lähen kooli* 'I go to school', *võtan kätte* 'I take in the hand', *pistan suhu* 'I stick into the mouth', *'kukub vette* 'falls into water', *'kostab kõrva* 'it sounds in [one's] ear', *'kostab kõrvu* 'it sounds in [one's] ears', but one cannot say †*'lähen sõja väesse*, †*'lähen koolisse*, †*võtan käesse*, †*pistan suusse*, †*'kukub veesse*, †*'kostab kõrvasse*, †*'kostab kõrva desse* although one can say *suhtun vaenu likult sõja väesse* 'I have a hostile attitude towards the army', *'see puutub käesse* 'it concerns the hand'. In addition, despite the correctness of *'kukub vette* 'falls into water' and, because of the absence of the illative-1 form, also *'kukub põõsasse* 'falls into a bush', there exist cases where the construction genitive plus the postposition *sisse* 'into' (*'kukub piima ~ supi ~ veini ~ värvi sisse* 'falls into the milk ~ soup ~ wine ~ paint') is clearly more preferable than the forms of illative-2 or illative-1. On the other hand, in Modern Standard Estonian, the illative forms ending in *-de* (*'keelde*, *'joonde*) tend to replace the corresponding illative-1 forms.

## ALLATIVE SINGULAR

Of the two allative endings, the ending *-lle* occurs only after a short vowel of the initial syllable, notably with the so-called short stems of personal pronouns (*'mulle* 'to me', *'sulle* 'to you' and *'talle* 'to him, to her'). In other cases the ending *-le* is used.

## 3.3. Adjective comparison

One part of adjectives have the characteristic category of comparability, i.e. they indicate the grade of a property expressed by the adjective. The category of comparability includes three members or degrees: the POSITIVE (*'kõrge* 'high'), the COMPARATIVE (*'kõrgem* 'higher') and the SUPERLATIVE (*'kõrgeim* 'the highest').

Adjectives take the comparative marker *-m* in the nominative singular and *-ma(-)* in other case forms. The marker regularly follows the usual stem vowel (attestable in genitive singular forms) for *u-*, *i-*, and *e-*stems and for trisyllabic *a-*stems and disyllabic *a-*stems of Q3. In disyllabic *a-*stems of Q2, the stem vowel *a* is regularly substituted for *e*; in stems of Q1 this is a rare feature. The adjectives *hea* 'good' and *palju* 'many, much' have suppletive comparative and superlative forms *parem* 'better', *parim* 'best' and *rohkem* 'more', *rohkeim* 'most'

The superlative marker is *-im* in the nominative singular and *-ima* in other case forms. Its occurrence is regular for adjectives having the plural partitive form ending in *-id* or *-i*. The superlative marker is *-em* in derivatives in *-ik* and *-lik*.

Alongside the suffixal superlatives for all comparable adjectives an analytic superlative form consisting of the sequence *'kõige* + the comparative degree form is possible where *'kõige* is the genitive singular form of *'kõik* 'all'. For several adjectives, only the analytic superlative is used.

The adjectives *'alu mine* 'lower', *'üle mine* 'upper', *pealmine* 'upper, topmost', *esi'mene* 'first, foremost, front', *viimane* 'last, recent', *'tagu mine* 'rear', *'väli mine* 'outer, external', *'äärmine* 'outer, peripheral' have no comparative forms but may have the analytical superlative forms.

**Table 21.** Adjective comparison

NSg	GSg	PPl	Comparative	Superlative	Gloss
<i>rahulik</i>	<i>rahu'liku</i>	<i>rahu'likke</i>	<i>rahu'likum</i>	<i>rahu'likem</i>	'peaceful'
<i>nüri</i>	<i>nüri</i>	<i>nürisid</i>	<i>nürim</i>	<i>kõige nürim</i>	'dull'
<i>sinine</i>	<i>sinise</i>	<i>siniseid</i>	<i>sinisem</i>	<i>siniseim</i>	'blue'
<i>uhke</i>	<i>uhke</i>	<i>uhkeid</i>	<i>uhkem</i>	<i>uhkeim</i>	'proud'
<i>suur</i>	<i>suure</i>	<i>suuri</i>	<i>suurem</i>	<i>suurim</i>	'big'
<i>madal</i>	<i>madala</i>	<i>madalaid</i>	<i>madalam</i>	<i>madalaim</i>	'low'
<i>rikas</i>	<i>'rikka</i>	<i>'rikkaid</i>	<i>rikkam</i>	<i>rikkaim</i>	'rich'
<i>must</i>	<i>musta</i>	<i>musti</i>	<i>mustem</i>	<i>mustim</i>	'black'
<i>'laisk</i>	<i>'laisa</i>	<i>'laisku</i>	<i>'laisem</i>	<i>'kõige 'laisem</i>	'lazy'
<i>vana</i>	<i>'vana</i>	<i>vanu</i>	<i>'vanem</i>	<i>'vanim</i>	'old'
<i>'kena</i>	<i>'kena</i>	<i>'keni</i>	<i>'kenam</i>	<i>'kenim</i>	'nice'

### 3.4. Numerals

Numerals are divided into cardinal, ordinal, and fractional numerals.

#### 3.4.1. Cardinal numerals

Estonian cardinal numerals and their patterns of declension are as follows:

	NSg	GSg	PSg	IIISg
0	<i>null</i>	<i>nulli</i>	<i>'nulli</i>	<i>nulli</i>
1	<i>'üks</i>	<i>'ühe</i>	<i>'üht(e)</i>	<i>'ühte</i>
2	<i>'kaks</i>	<i>'kahe</i>	<i>'kaht(e)</i>	<i>'kahte</i>
3	<i>'kolm</i>	<i>'kolme</i>	<i>'kolme</i>	<i>'kolme</i>
4	<i>neli</i>	<i>'nelja</i>	<i>'nelja</i>	<i>'nelja</i>
5	<i>'viis</i>	<i>'viie</i>	<i>'viit</i>	<i>'viide</i>
6	<i>'kuus</i>	<i>'kuue</i>	<i>'kuut</i>	<i>'kuude</i>
7	<i>seitse</i>	<i>'seitsme</i>	<i>seitset</i>	<i>seitsmesse</i>
8	<i>'kaheksa</i>	<i>'kaheksa</i>	<i>'kaheksat</i>	<i>'kahek sasse</i>
9	<i>'üheksa</i>	<i>'üheksa</i>	<i>'üheksat</i>	<i>'ühek sasse</i>
10	<i>'kümme</i>	<i>'kümne</i>	<i>'kümnet</i>	<i>'kümnesse</i>
100	<i>sada</i>	<i>saja</i>	<i>sadat</i>	<i>sajasse</i>
1000	<i>'tuhat</i>	<i>'tuhande</i>	<i>'tuhandet</i>	<i>'tuhan 'desse</i>
10 <sup>6</sup>	<i>miljon</i>	<i>miljoni</i>	<i>miljonit</i>	<i>miljo 'nisse</i>
10 <sup>9</sup>	<i>'miljard</i>	<i>miljardi</i>	<i>miljardit</i>	<i>miljar 'disse</i>

The formation of cardinal numerals from 11 to 19 is based on subtraction, cf. *'üks teist* ~ *'üks teist'kümmend* 'eleven' (i.e. 'one of the second ten'),

*'kaks teist ~ 'kaks teist kümmed* 'twelve' where *kümmed* is the former partitive form of *kümme* 'ten'; the corresponding ordinals are *'ühe teist kümnes* and *'kahe teist kümnes*. The cardinal numerals for tens, hundreds, thousands, millions etc. are based on multiplication, being nevertheless singular, cf. *'kaks kümmed* '20', *'kaks sada* '200', *'kaks tuhat* '2000', *'kaks miljonit* '2,000,000'. Note that the numerals for 11–19, tens and hundreds make compounds, and their pattern of declension in cases other than the nominative, genitive, and partitive differs from that of the numerals for thousands, millions etc., cf.

	12	20	200	2000
NSg	<i>'kaks teist('kümmed)</i>	<i>'kaks kümmed</i>	<i>'kaks sada</i>	<i>'kaks tuhat</i>
GSg	<i>'kahe teist(kümne)</i>	<i>'kahe kümne</i>	<i>'kahe saja</i>	<i>'kahe tuhande</i>
PSg	<i>'kaht teist('kümmed)</i>	<i>'kaht(e) kümmed</i>	<i>'kaht(e) sada</i>	<i>'kaht(e) tuhat</i> ~ <i>'kaht(e) tuhandet</i>
IIISg	<i>'kahe teist kümnesse</i>	<i>'kahe kümnesse</i>	<i>'kahe sajasse</i>	<i>'kahte tuhan desse</i>
IneSg	<i>'kahe teist kümnes</i>	<i>'kahe kümnes</i>	<i>'kahe sajas</i>	<i>'kahes tuhandes</i>

The declension of even longer numerals, e.g. the numeral for 555,555, follows the same patterns:

NSg	<i>'viis sada viis kümmed viis tuhat viis sada viis kümmed viis</i>
GSg	<i>'viie saja viie kümne viie tuhande viie saja viie kümne viie</i>
PSg	<i>'viit sada viit kümmed viit tuha(nde)t viit sada viit kümmed viit</i>
IIISg	<i>'viie saja viie kümne viie tuhande viie saja viie kümne viide</i>

### 3.4.2. Ordinal numerals

The ordinal numerals are mostly derived from the genitive singular stem of cardinal numerals. In the course of derivation the vowel *-e* is substituted for the stem vowel *-i* of certain cardinal numerals. The ordinal *'kolmas* 'the third' is different in that the derivational suffixes are added to the stem vowel *-a* instead of *-e*; *'esi mene* 'the first' and *'teine* 'the second' are not related to the corresponding cardinal numerals.

	NSg	GSg	PSg	IIISg	GPI
1.	<i>'esi mene</i>	<i>'esi mese</i>	<i>'esimest</i>	<i>'esi messe</i>	<i>'esi meste</i>
2.	<i>'teine</i>	<i>'teise</i>	<i>'teist</i>	<i>'teise</i>	<i>'teiste</i>
3.	<i>'kolmas</i>	<i>'kolmanda</i>	<i>'kolmandat</i>	<i>'kolman dasse</i>	<i>'kolman date</i>
4.	<i>'neljas</i>	<i>'neljanda</i>	<i>'neljandat</i>	<i>'neljan dasse</i>	<i>'neljan date</i>
8.	<i>'kaheksas</i>	<i>'kahek sanda</i>	<i>'kahek sandat</i>	<i>'kahek sandasse</i>	<i>'kahek sandate</i>
10.	<i>'kümnes</i>	<i>'kümnenda</i>	<i>'kümnendat</i>	<i>'künnen dasse</i>	<i>'künnen date</i>
1000.	<i>'tuhandes</i>	<i>'tuhan denda</i>	<i>'tuhan dendat</i>	<i>'tuhan dendasse</i>	<i>'tuhan dendate</i>
10 <sup>6</sup>	<i>'miljones</i>	<i>'miljo nenda</i>	<i>'miljo nendat</i>	<i>'miljo nendasse</i>	<i>'miljo nendate</i>

### 3.4.3. Fractional numerals

Except for the informal fractional numerals *pool* 'half' and *veerand* 'quarter', simple fractional numerals, i.e. denominators are derived by the analogy with ordinal numerals by the means of the suffix *-ndik*, cf. *'kahendik* 'a half', *'kolmandik* 'a third', *'neljandik* 'a quarter'. Fractional numerals with numerators are inflected similarly to cardinals for thousands, millions, etc., cf.

	One third	Two-thirds
NSg	<i>'üks 'kolmandik</i>	<i>'kaks 'kolman dikku</i>
GSg	<i>'ühe 'kolman diku</i>	<i>'kahe 'kolman diku</i>
PSg	<i>'üht(e) 'kolman dikku</i>	<i>'kaht(e) 'kolman dikku</i>
IllSg	<i>'ühte 'kolman dikku</i>	<i>'kahte 'kolman dikku</i>
IneSg	<i>'ühes 'kolman dikus</i>	<i>'kahes 'kolman dikus</i>

## 3.5. Pronouns

With the exception of the pronouns *mina* 'I', *sina* 'you (Sg)', *meie* 'we', *teie* 'you (Pl)' pronouns can serve as substitutes for words of different nominal classes: nouns, adjectives, and numerals. Hence, it is possible to speak about proper pronouns or prosubstantives (*'tema* 'he, she, it', *'kes* 'who', *mis* 'what'), proadjectives (*'mingi* 'some, a certain', *selline* 'such', *milline* 'which', *nii'sugune* 'such, of that kind'), pronominals (*'mitu* 'several; how many', *mitmes* 'which in number', *'mitmendik* 'which part'). Depending on the context, pronouns are divided into personal, reflexive, demonstrative, interrogative, relative, indefinite, and negative.

### 3.5.1. Personal pronouns

Personal pronouns have in addition to the so-called long forms also short forms. Most short forms usually occur in unstressed positions. In the singular the first and the second person short pronouns have two stems, one of which occurs in the nominative, cf. *ma* 'I' and *sa* 'thou', the other stem *mu(-)* and *su(-)* elsewhere, except in the translative, terminative, essive and abessive. Similarly, in the third person plural forms of the illative, inessive, elative, allative, adessive, ablative, and translative the monosyllabic stem *nei-* can be used. These forms as well as the partitive form were introduced from the paradigm of the demonstrative plural pronoun *need* 'these'. In the plural the first and the second person have short forms *me* 'we' and *te* 'you' only in the nominative and the genitive, in contrast to the third person where the short-

stem form occurs in several case forms. The short comitative forms of singular pronouns belong to the informal style.

Singular	1 <sup>st</sup> person	2 <sup>nd</sup> person	3 <sup>rd</sup> person
N	<i>mina ~ ma</i>	<i>sina ~ sa</i>	<i>'tema ~ ta</i>
G	<i>minu ~ mu</i>	<i>sinu ~ su</i>	<i>'tema ~ ta</i>
P	<i>mind</i>	<i>sind</i>	<i>'teda</i>
Ill	<i>minusse ~ musse</i>	<i>sinusse ~ 'susse</i>	<i>'temasse ~ 'tasse</i>
Ine	<i>minus ~ mus</i>	<i>sinus ~ sus</i>	<i>'temas ~ tas</i>
Ela	<i>minust ~ must</i>	<i>sinust ~ sust</i>	<i>'temast ~ tast</i>
All	<i>minule ~ 'mulle</i>	<i>sinule ~ 'sulle</i>	<i>'temale ~ 'talle</i>
Ade	<i>minul ~ mul</i>	<i>sinul ~ sul</i>	<i>'temal ~ tal</i>
Abl	<i>minult ~ mult</i>	<i>sinult ~ sult</i>	<i>'temalt ~ talt</i>
Trl	<i>minuks</i>	<i>sinuks</i>	<i>'temaks</i>
Ter	<i>minuni</i>	<i>sinuni</i>	<i>'temani</i>
Ess	<i>minuna</i>	<i>sinuna</i>	<i>'temana</i>
Abe	<i>minuta</i>	<i>sinuta</i>	<i>'temata</i>
Com	<i>minuga ~ muga</i>	<i>sinuga ~ suga</i>	<i>'temaga ~ taga</i>
Plural	1 <sup>st</sup> person	2 <sup>nd</sup> person	3 <sup>rd</sup> person
N	<i>meie ~ me</i>	<i>'teie ~ te</i>	<i>'nemad ~ nad</i>
G	<i>meie ~ me</i>	<i>'teie ~ te</i>	<i>nende</i>
P	<i>meid</i>	<i>'teid</i>	<i>'neid</i>
Ill	<i>meisse</i>	<i>'teisse</i>	<i>'nendesse ~ 'neisse</i>
Ine	<i>meis</i>	<i>'teis</i>	<i>'nendes ~ 'neis</i>
Ela	<i>meist</i>	<i>'teist</i>	<i>'nendest ~ 'neist</i>
All	<i>meile</i>	<i>'teile</i>	<i>'nendele ~ 'neile</i>
Ade	<i>'meil</i>	<i>'teil</i>	<i>'nendel ~ 'neil</i>
Abl	<i>meilt</i>	<i>'teilt</i>	<i>'nendelt ~ 'neilt</i>
Trl	<i>meieks ~ meiks</i>	<i>'teieks ~ 'teiks</i>	<i>'nendeks ~ 'neiks</i>
Ter	<i>meieni</i>	<i>'teieni</i>	<i>'nendeni</i>
Ess	<i>meiena</i>	<i>'teiena</i>	<i>'nendena</i>
Abe	<i>meieta</i>	<i>'teieta</i>	<i>'nendeta</i>
Com	<i>meiega</i>	<i>'teiega</i>	<i>'nendega</i>

### 3.5.2. Reflexive pronouns

Reflexive pronouns are *'ise* ‘-self’, *oma*, and the reduplicative and emphatic *'ise enese ~ 'ise enda*, *oma enese ~ oma enda*.

The reflexive pronoun ‘-self’ is suppletive. Although it can be used in the plural, usually its singular forms are used also for the plural.

	Singular	Plural
N	<i>'ise</i>	
G	<i>'enese ~ 'enda</i>	<i>'eneste ~ 'endi</i>
P	<i>'ennast ~ end</i>	<i>'ennast ~ 'endid</i>
Ill	<i>'ene sesse ~ 'endasse</i>	<i>'enes 'esse ~ 'endis</i>
Ine	<i>'eneses ~ 'endas</i>	<i>'enestes ~ 'endis</i>

The pronoun has three different functions. First, its case forms, except the nominative, may have the reflexive function showing that the complement of the verb is identical with the agent, cf. *Kindral 'kuulutas 'enese 'keisriks* 'The general declared **himself** the emperor', *'Tee see asi 'ene 'sele selgeks* 'Make this thing clear to **yourself**'. Second, its genitive forms may be used as noun modifiers having the possessive meaning *'Mees 'nägi 'kaup mehe 'letil 'enese 'nuga* 'The man saw on the storekeeper's counter **his own** knife'. Third, the reflexive pronoun as a complement of a personal possessive or a relative pronoun has an emphasizing function. This is the only function of the nominative case form *'ise*, cf. *Ta rääkis seda 'mulle 'ene 'sele* 'He told it to me **myself**', *'Sina 'ise 'lavas 'tasid 'varguse* 'You **yourself** fabricated the theft'.

The pronoun *oma* 'own' (substitutable by *'kelle?* 'whose (genitive)') is used as complement that has the same reference as the subject of the clause or sentence, cf. *Ta on 'ini 'mene, kes 'ise 'oma 'juttu 'naerab* 'He is a person who himself laughs at **his own** talk', *Jutusta oma lastest!* 'Tell (us) about **your** children!' The compound pronouns *'ise enese ~ 'ise enda* and *oma enese ~ oma enda* reinforce the meaning of *oma*.

### 3.5.3. Reciprocal pronouns

The compound reciprocal pronouns *'teine 'teise* 'each other' and *'üks 'teise* 'one another' are used if the action or relation of two or several participants is mutual. Only the second component *'teise* 'other; second (GSg)' is inflected, cf. also 3.4; the paradigms have only the singular case forms with no nominative case.

### 3.5.4. Demonstrative pronouns and other demonstratives

The simple demonstrative pronouns of Estonian include *'see* 'this', *too* 'that', *'sama* 'same', *muu* 'other, else'. Most Estonians manage with one demonstrative-locative pronoun *see* 'this' which, similarly to personal pronouns, has in addition to long forms also short forms, which can be unstressed. His-

torically, the genitive plural form and all long forms were introduced from the paradigm of the third person plural pronoun *nemad*. Another demonstrative-locative pronoun acceptable in Standard Estonian *too* 'that' is used characteristically by South Estonians. The pronoun *sama* indicates the identity of its referent to a certain person, object or event while *muu* indicates non-identity. The pronoun *teine* 'other', cf. the similar ordinal numeral *teine* 'the second' is to a great extent synonymic with *muu* unless non-identity concerns only a single person, object or event or a single set of persons, objects or events, cf. *Ma räägin sinust, mida teised ~ muud poisid teevad, pole minu asi* 'I'm speaking about you, what other boys do is none of my business' vs. *Need on mu tänava kingad, teised on peo kingad, muid kingi mul ei ole* 'These are my walking shoes, others are ballroom shoes, I have no other shoes'. The pronouns *see* and *sama* are inflected as follows:

	Singular	Plural	Singular	Plural
N	<i>see</i>	<i>need</i>	<i>sama</i>	<i>samad</i>
G	<i>selle</i>	<i>nende</i>	<i>sama</i>	<i>samade</i>
P	<i>seda</i>	<i>neid</i>	<i>sama</i>	<i>samu</i>
Ill	<i>sellesse ~ sesse</i>	<i>nendesse ~ neisse</i>	<i>samasse ~ samma</i>	<i>sama desse</i>
Ine	<i>selles ~ ses</i>	<i>nendes ~ neis</i>	<i>samas</i>	<i>samades</i>
Ela	<i>sellest ~ sest</i>	<i>nendest ~ neist</i>	<i>samast</i>	<i>samadest</i>
All	<i>sellele</i>	<i>nendele ~ neile</i>	<i>samale</i>	<i>sama dele</i>
Ade	<i>sellel ~ sel</i>	<i>nendel ~ neil</i>	<i>samal</i>	<i>samadel</i>
Abl	<i>sellelt ~ selt</i>	<i>nendelt ~ neilt</i>	<i>samalt</i>	<i>samadelt</i>
Trl	<i>selleks ~ seks</i>	<i>nendeks ~ neiks</i>	<i>samaks</i>	<i>samadeks</i>
Ter	<i>selleni</i>	<i>nendeni</i>	<i>samani</i>	<i>sama deni</i>
Ess	<i>sellena</i>	<i>nendena</i>	<i>samana</i>	<i>sama dena</i>
Abe	<i>selleta</i>	<i>nendeta</i>	<i>samata</i>	<i>sama deta</i>
Com	<i>sellega</i>	<i>nendega</i>	<i>samaga</i>	<i>sama dega</i>

The declension of *too* is entirely analogical to that of *see*, cf. GSg *tolle*, PSg *toda*, NPl *nood*, GPI *nonde*, PPl *noid*. The pronoun *muu* is inflected similarly to most monosyllabic vocalic stems:

	Singular	Plural
NSg	<i>muu</i>	<i>muud</i>
GSg	<i>muu</i>	<i>muude</i>
PSg	<i>muud</i>	<i>muid</i>
IllSg	<i>muusse</i>	<i>muudesse ~ muisse</i>

Demonstrative pronouns form compounds with each other, cf. *see sama* 'this, the same', NPl *need samad* and *too sama* 'that same', NPl *nood samad*. Especially when there is a need to distinguish between two similar objects,

the use of one single attributive demonstrative pronoun *see* and its case forms has led to the use of three case forms of the local proadverbs for 'here' (*siia* : *siin* *siit*) and 'there' (*sinna* : *seal* : *sealt*) instead of both the interior and exterior cases of the demonstrative pronoun, cf. the declension of *'see* (*'see sama*) *põld siin* 'this field here' and *'see* (*'see sama*) *'maja seal* 'this house there'.

N	<i>see</i> ( <i>'see sama</i> ) <i>põld siin</i>	
All	<i>sellele</i> ( <i>'sellele samale</i> ) <i>põllule siin</i>	~ <i>siia</i> ( <i>'siia- samasse, siia samma</i> ) <i>põllule</i>
Ade	<i>sellel</i> ( <i>'sellel samal</i> ) <i>põllul siin</i>	~ <i>siin</i> ( <i>'siin- samas</i> ) <i>põllul</i>
Abl	<i>sellelt</i> ( <i>'sellelt samalt</i> ) <i>põllult siin</i>	~ <i>'siit</i> ( <i>'siit- samast</i> ) <i>põllult</i>
Ter	<i>selle</i> ( <i>'selle sama</i> ) <i>põlluni siin</i>	~ <i>siia</i> ( <i>'siia- samasse</i> ) <i>põlluni</i>
N	<i>see</i> ( <i>'see sama</i> ) <i>'maja seal</i>	
Ill	<i>sellesse</i> ( <i>'sellesse samasse</i> ) <i>'majja seal</i>	~ <i>sinna</i> ( <i>'sinna- samasse, sinna- samma</i> ) <i>'majja</i>
Ine	<i>selles</i> ( <i>'selles samas</i> ) <i>'majas seal</i>	~ <i>seal</i> ( <i>'seal- samas</i> ) <i>'majas</i>
Ela	<i>sellest</i> ( <i>'sellest samast</i> ) <i>'majast seal</i>	~ <i>sealt</i> ( <i>'sealt- samast</i> ) <i>'majast</i>
Ter	<i>selle</i> ( <i>'selle sama</i> ) <i>'majani seal</i>	~ <i>sinna</i> ( <i>'sinna- samasse</i> ) <i>'majani</i>

There exists also a set of demonstrative proadjectives either derived, cf. *selline* 'such' (from the demonstrative pronoun *see* 'this', Gsg *selle*) and informal *säärane* 'such kind of' and *säher dune* 'such kind of', or compounds *see sugune* 'such', *sama sugune* 'of the same kind, similar', *see samane* 'the very same', *too samane* 'that same'. The demonstrative proadjective *nii sugune* 'such, of that kind' has been formed from the proadverb *nii* 'so, in this way'. The demonstrative proadjectives *selline* and *säher dune* are inflected as normal trisyllabic and tetrasyllabic *ne*-stems:

	Singular	Plural	Singular	Plural
N	<i>selline</i>	<i>sellised</i>	<i>säher dune</i>	<i>säher dused</i>
G	<i>sellise</i>	<i>selliste</i>	<i>säher duse</i>	<i>säher duste</i>
P	<i>sellist</i>	<i>selliseid</i>	<i>säher dust</i>	<i>säher dusi</i>
Ill	<i>sellisesse</i>	<i>sellisesse</i>	<i>säher dusse</i>	<i>säher dustesse</i>
		~ <i>sellisaisse</i>		~ <i>säher dusisse</i>

The final components of compound adjectives in *-sugune* and *-samane* are inflected on the model of *selline*. Note that *see* in *see sugune* is not inflected while *'see* and *too* in *'see samane* and *too samane* are inflected.

### 3.5.5. Interrogative and relative pronouns

Estonian has the interrogative-relative pronouns *'kes* 'who', *'mis* 'what', both of which are usually inflected for the singular and are inflected for the plural only when the plurality is specially emphasized, and the pronoun *'kumb* 'which (of the two)' that is in the singular or in plural depending on singularity or plurality of the two sets under selection, cf. *'kumb* *'king* 'which one of the two shoes' and *'kummad* *'kingad* 'which [pair] of the two pairs of shoes' The pronouns *'kes*, *'mis*, and *kumb* are inflected as follows:

	Singular	Plural	Singular	Plural	Singular	Plural
N	<i>'kes</i>	<i>'kes</i>	<i>mis</i>	<i>mis</i>	<i>'kumb</i>	<i>'kummad</i>
G	<i>'kelle</i>	<i>'kellede</i>	<i>mille</i>	<i>millede</i>	<i>'kumma</i>	<i>'kumbade</i>
P	<i>'keda</i>	<i>'keda</i>	<i>mida</i>	<i>mida</i>	<i>'kumba</i>	<i>'kumbi</i>
Ill	<i>'kellesse</i>	<i>'kelle'esse</i>	<i>millesse</i>	<i>mille'esse</i>	<i>'kumba</i>	<i>'kumba'esse</i>

Similarly, the proadjectives with the meaning 'which' are both interrogative and relative, namely *milline* and *'mis sugune*, both of which have been formed from the pronoun *mis*, and the adjective *mäher dune*, which is sometimes used in the informal style.

A set of interrogatives and relatives are case forms of the stem *ku-*, cf. illative-2 *'kuhu* 'where (to)', inessive *kus* 'where', elative *kust* 'where from', terminative *'kuhuni* 'till what place', essive *'kuna* 'when' These forms form compounds with several postpositions, cf. *'kuhu poole* 'towards where, in which direction', *'kus pool* 'in which direction', *'kust poolt* 'from which direction', *'kust'kaudu* 'which way, through which point', *'kust'peale* 'since where; since when', *'kust'saadik* 'since when' The same stem is present also in the interrogative-relative *'kuidas* 'how, in which way', cf. *'Kuidas sa tead?* 'How do you know?', and in the interrogative-relative *'kui* 'how', cf. *'kui vana* 'how old' and the conjunction *'kui* 'when; if'

### 3.5.6. Indefinite pronouns

Indefinite pronouns *'keegi* 'somebody', *miski* 'something', *mingi* 'a, some, a certain', and *'üks* 'a, an' can replace both for nouns and adjectives. In a negative sentence their occurrence as substitutes for a noun may lead to ambiguity because of homonymity with similar negative pronouns, cf. 3.5.7.

The pronouns *keegi* and *miski* are inflected only for the singular, *mingi* is inflected also for the plural:

	Singular	Singular	Singular	Plural
NSg	<i>'keegi</i>	<i>miski</i>	<i>'mingi</i>	<i>mingid</i>
GSg	<i>'kellegi</i>	<i>millegi</i>	<i>'mingi</i>	<i>mingite</i>
PSg	<i>'kedagi</i>	<i>midagi</i>	<i>'mingit</i>	<i>mingeid</i>
IIISg	<i>'kelles segi</i>	<i>'milles segi</i>	<i>'mingisse</i>	<i>mingi`tesse ~ mingeisse</i>

The pronouns *'iga* 'every', *'iga`üks* 'everybody', *mõlemad* 'both', *'kumbki* 'either', *emb-`kumb* 'either, this or another', *'kogu* 'whole', *'kõik* 'all', *palju* 'many, much', *veidi* 'a little, a few', *vähe* 'little, few', *mõni* 'some' denote quantity or amount of the modified or substituted noun. The pronoun *palju* is used also as an interrogative pronoun 'how much, how many', mostly together with the premodifier *'kui* 'how' (*'Palju vett alles on?* 'How much water is left?'). The pronoun *'kogu* and *veidi* are not inflected, *iga* and *'iga`üks* are inflected only for the singular, *mõlemad* lacks the singular nominative form. *ükski* and *'kumbki* are inflected for the plural only with plural nouns (*mitte ühedki kingad* 'no pair of shoes').

NSg	<i>'iga</i>	–	<i>'kumbki</i>	<i>'kõik</i>	<i>mõni</i>
GSg	<i>'iga</i>	<i>mõlema</i>	<i>'kummagi</i>	<i>'kõige</i>	<i>mõne</i>
PSg	<i>'iga(t)</i>	<i>mõlemat</i>	<i>'kumbagi</i>	<i>'kõike</i>	<i>mõnd ~ mõnda</i>
IIISg	<i>'igasse</i>	<i>mõle`masse</i>	<i>'kummas segi</i> <i>~`kumbagi</i>	<i>'kõigesse</i>	<i>mõnesse</i> <i>~ mõnda</i>
NPI		<i>mõlemad</i>	<i>'kummadki</i>	<i>'kõik</i>	<i>mõned</i>
GPI		<i>mõlemate</i>	<i>'kumba degi</i>	<i>'kõigi</i> <i>~`kõikide</i>	<i>mõnede</i>
PPI		<i>mõlemaid</i>	<i>'kumbigi</i>	<i>'kõiki</i>	<i>mõnesid</i>
IIIPi		<i>mõle matesse</i> <i>~`mõle`maisse</i>	<i>'kumba`dessegi</i>	<i>'kõigisse</i> <i>~`kõiki`desse</i>	<i>mõne`desse</i>

### 3.5.7. Negative pronouns

Negative pronouns *'keegi* 'nobody', *miski* 'nothing' can replace nouns, *'keegi* 'nobody', *ükski* 'no', *'mingi* 'no', *'kumbki* 'neither' can occur as attributes. All negative pronouns are often premodified by the negative intensifier *mitte*, which guarantees the unambiguity of negative sentences containing these pronouns. Otherwise a negative sentence, e.g. *Keegi ei mängi malet*, may ambiguously mean either 'someone does not play chess' or 'nobody plays chess'. The sentence *Mitte`keegi ei`mängi malet* with its transparent double negation unambiguously renders the second meaning.

### 3.6. Verb inflection

The verb in Estonian has (1) finite forms that occur as predicates or auxiliary components of complex predicates and (2) non-finite forms. The latter occur (a) in complex predicates together with some finite form (past participles), (b) similarly to adjectives as attributes and predicatives (participles), (c) as adverbials (supines and gerunds), and (d) as subjects and objects (infinitives). Close to non-finite forms are some verbal nouns, namely agent nouns (*nomen agentis*), patient nouns and action nouns (*nomen actionis*) in *-mine*, cf. *sööja* ‘eater’, *söönu* ‘one who ate’, *söödu* ‘something that was eaten’, *söömine* ‘eating’.

Finite forms are inflected for mood, tense, voice, aspect, person, and number. The verb has altogether five moods: the indicative (Ind), conditional (Cnd), imperative (Imp), quotative (Quo), and jussive (Jus). It has two simple tenses: the present and the past, two voices: personal (Ps) and impersonal (Ips), affirmation (Aff) and negation (Neg). The affirmative personal forms distinguish between three persons: the first (1), the second (2), and the third (3) persons and two numbers: the singular (Sg) and the plural (Pl), cf. Table 22.

Non-finite forms behave differently. Participles are inflected for voice and tense, present participles also for case and number. Similarly, supines are inflected for voice and case, the personal supine is inflected for five cases (but not for number). The impersonal supine has only one case. There is one infinitive and one gerund; the gerund can be explained as the inessive case form of the infinitive, cf. Table 23.

#### 3.6.1. Voice, person, and number

Finite forms, participles, and supines share the category of voice: finite forms inflected for person and number stand in contrast to impersonal finite forms (cf. *ta elab siin* ‘he lives here’ vs. *siin elatakse* ‘someone lives here’). Personal participles are opposed to impersonal participles (cf. *valvav mees* ‘the guarding man’ vs. *valvatav mees* ‘the man being guarded’ and *roostetav raud* ‘the rusting iron’, *siin elatud aeg* ‘the time one spent living here’ vs. *kogu valvatav aeg* ‘all the time one spends guarding’). Personal supines are opposed to impersonal supines (*ma pean seda tegema* ‘I must do it’ and *seda peab tegema* ‘it must be done’ vs. *seda peab tehtama* ‘someone must do it’, *siin peab elama* ‘one must live here’ vs. *selles koopas peab elatama* ‘someone must live in this cave’, literally ‘this.Ine cave.Ine must.3Sg live.Ips.Sup&Ill’).

**Table 22.** Finite forms and their formatives

FINITE FORMS	PERSONAL				IMPERSONAL	
	Affirmative			Negative	Affirmative	Negative
	1 <sup>st</sup> p.	2 <sup>nd</sup> p.	3 <sup>rd</sup> p.			
INDICATIVE						
Present Singular	<i>n</i>	<i>d</i>	<i>b</i>	—	<i>akse dakse</i> <i>takse</i>	<i>da ta</i>
Plural	<i>me</i>	<i>te</i>	<i>vad</i>			
Past Singular	<i>sin in</i>	<i>sid id</i>	<i>is s i</i>	<i>nud</i>	<i>di ti</i>	<i>dud tud</i>
Plural	<i>sime ime</i>	<i>site ite</i>	<i>sid id</i>			
CONDITIONAL						
Present Singular	<i>ks(in)</i>	<i>ks(id)</i>	<i>ks</i>	<i>ks</i>	<i>daks taks</i>	
Plural	<i>ks(ime)</i>	<i>ks(ite)</i>	<i>ks(id)</i>			
Past Singular	<i>nuks(in)</i>	<i>nuks(id)</i>	<i>nuks</i>	<i>nuks</i>	<i>duks tuks</i>	
Plural	<i>nuks(ime)</i>	<i>nuks(ite)</i>	<i>nuks(id)</i>			
QUOTATIVE						
Present Sg&Pl	<i>vat</i>				<i>davat tavat</i>	
Past Sg&Pl	<i>nuvat nud</i>				<i>dud tud</i>	
JUSSIVE						
Present Sg&Pl	<i>gu ku</i>				<i>dagu tagu</i>	
Past Sg&Pl	<i>nud</i>				<i>dud tud</i>	
IMPERATIVE					Affirmative & Negative	
Singular		—				
Plural	<i>gem kem</i>	<i>ge ke</i>				
	1 <sup>st</sup> p.	2 <sup>nd</sup> p.	3 <sup>rd</sup> p.			
	Affirmative & Negative					

**Table 23.** Non-finite forms and their formatives

NON-FINITE FORMS	PERSONAL	IMPERSONAL
Participles		
Present	<i>v</i>	<i>dav tav</i>
Past	<i>nud</i>	<i>dud tud</i>
Supine		
Illative	<i>ma</i>	<i>dama tama</i>
Inessive	<i>mas</i>	—
Elative	<i>mast</i>	—
Translative	<i>maks</i>	
Abessive	<i>mata</i>	
Infinitive	<i>da a ta</i>	
Gerund	<i>des es tes</i>	

The PERSONAL VOICE (Ps) is represented by personal endings in affirmative finite forms of the indicative, conditional and imperative moods, and co-occurrence of the nominative case forms of personal pronouns with finite and participial verb forms, cf. Table 24.

**Table 24.** Personal endings of the Estonian verb

Number	Mood	Person		
		1	2	3
Singular	Ind & Cnd	<i>-n</i>	<i>-d</i>	$\emptyset$
	Imp	—	$\emptyset$	—
Plural	Ind & Cnd	<i>-me</i>	<i>-te</i>	<i>-d</i>
	Imp	<i>-m</i>	$\emptyset$	—

**Key:**  $\emptyset$  stands for the absence of a personal ending in the corresponding mood; a dash (—) denotes the absence of the corresponding form in the mood.

## THE IMPERSONAL VOICE

The impersonal voice is a characteristic morphological means of Estonian and other Finnic languages, except Livonian, used to impersonalize an agent expressed as the grammatical subject of a clause. The resulting clause is subjectless. Impersonalization can be applied if the subject of the underlying clause denotes a human agent; it does not depend on affirmation/negation, mood, or tense. The markers of the impersonal voice (Ips) include (a) *-a-*, *-da-* and *-ta-* in the affirmative present indicative, (b) *-da(-)* and *-ta(-)* in the conditional, quotative, and jussive moods and in the negative present indicative, (c) *-d-* and *-t-* in the imperfect tense of the indicative mood.

The marker *-a-* occurs in affirmative impersonal forms of the present indicative after monosyllabic vocalic stems and after consonantal stems from disyllabic *e*-stems of the verbs *olema* 'to be', *tulema* 'to come', *minema* 'to go', *panema* 'to put', *surema* 'to die', *tegema* 'to do', *nägema* 'to see'. All the other impersonal forms take markers beginning in *d* or *t* depending on the preceding consonant: *d* occurs after monosyllabic vocalic stems and after consonantal stems ending in a resonant, *t* occurs in all other cases. Except for words taking the impersonalizer *-a-* in present impersonal forms, the stem remains unchanged in impersonal forms, cf. the impersonal forms of the verbs *sööma* 'to eat', *käima* 'to walk', *tegema* 'to do', *tulema* 'to come', *elama* 'to live', *tundma* 'to feel', *naerma* 'to laugh', *tõusma* 'to rise', *söötma* 'to feed' and *lukkama* 'to push', *õmblema* 'to sew'.

IpsPr	IpsPrNeg	IpsIpf	IpsCnd	IpsQuo	IpsJus	IpsPastPle
<i>süüakse</i>	<i>sööda</i>	<i>söödi</i>	<i>söödaks</i>	<i>söödavat</i>	<i>söödagu</i>	<i>söödud</i>
<i>käiakse</i>	<i>käida</i>	<i>käidi</i>	<i>käidaks</i>	<i>käidavat</i>	<i>käidagu</i>	<i>käidud</i>
<i>tehakse</i>	<i>tehta</i>	<i>tehti</i>	<i>tehtaks</i>	<i>tehtavat</i>	<i>tehtagu</i>	<i>tehtud</i>
<i>tullakse</i>	<i>tulda</i>	<i>tuldi</i>	<i>tuldaks</i>	<i>tuldavat</i>	<i>tuldagu</i>	<i>tuldud</i>
<i>elatakse</i>	<i>elata</i>	<i>elati</i>	<i>elataks</i>	<i>elatavat</i>	<i>elatagu</i>	<i>elatud</i>
<i>tuntakse</i>	<i>tunta</i>	<i>tunti</i>	<i>tuntaks</i>	<i>tuntavat</i>	<i>tuntagu</i>	<i>tuntud</i>
<i>naerdakse</i>	<i>naerda</i>	<i>naerdi</i>	<i>naerdaks</i>	<i>naerdavat</i>	<i>naerdagu</i>	<i>naerdud</i>
<i>tõustakse</i>	<i>tõusta</i>	<i>tõusti</i>	<i>tõustaks</i>	<i>tõustavat</i>	<i>tõustagu</i>	<i>tõustud</i>
<i>sööde'takse</i>	<i>söödeta</i>	<i>söödeti</i>	<i>söödetaks</i>	<i>sööde'tavat</i>	<i>sööde'tagu</i>	<i>söödetud</i>
<i>luka'takse</i>	<i>lükata</i>	<i>lükati</i>	<i>lükataks</i>	<i>luka'tavat</i>	<i>luka'tagu</i>	<i>lükatud</i>
<i>õmmel'dakse</i>	<i>õmmelda</i>	<i>õmmeldi</i>	<i>õmmeldaks</i>	<i>õmmel'davat</i>	<i>õmmel'dagu</i>	<i>õmmeldud</i>

### 3.6.2. Mood

#### THE INDICATIVE

The mood in Estonian includes the indicative, conditional, imperative, quotative and jussive.

The indicative mood has no characteristic marker.

The indicative mood has two paradigms of simple personal tense forms, namely the PRESENT tense and a past tense called the IMPERFECT.

#### Present indicative

Usually the personal present tense forms have no special present tense marker. There are, however, three verb forms *'kuulukse* 'it is heard that', *'näikse* 'it seems that' and *'tunnukse* 'it seems that, it is felt that' from *kuulduma* 'to be heard', *näima* 'to seem' and *tunduma* 'to seem, to be felt' where the formative *-kse* is used, e.g. *Mis 'kuulukse?* 'What can be heard?' (= 'Any news?'), *Sa 'kuulukse 'kirjutanud raamatu* 'It is rumoured that you have written a book', *Ta 'näikse 'olevat 'haige* 'He seems to be ill' As there is no morphological passive in Estonian, the three passive verbs are sometimes referred to as the *kse*-PRESENT TENSE (*kse-olevik*).

The present indicative forms of verbs with weakening gradation are characteristically in the weak grade, and those of verbs with strengthening gradation take the strong grade. The quantity of verb forms with a monosyllabic vocalic stem and the verb *'tegema* 'to do', having a weak-grade monosyllabic stem, however, changes with the length of personal endings, cf. the paradigms of the present indicative of the verbs *sööma* 'to eat', *käima* 'to

walk', *tegema* 'to do', *tulema* 'to come', *elama* 'to live', *tundma* 'to feel', *naerma* 'to laugh', *tõusma* 'to rise', *söötma* 'to feed' and *lukkama* 'to push', *õmblema* 'to sew':

1Sg	2Sg	3Sg	1Pl	2Pl	3Pl
<i>söön</i>	<i>sööd</i>	<i>sööb</i>	<i>sööme</i>	<i>sööte</i>	<i>söövad</i>
<i>käin</i>	<i>käid</i>	<i>käib</i>	<i>käime</i>	<i>käite</i>	<i>käivad</i>
<i>teen</i>	<i>teed</i>	<i>teeb</i>	<i>teeme</i>	<i>teete</i>	<i>teevad</i>
<i>tulen</i>	<i>tuled</i>	<i>tuleb</i>	<i>tuleme</i>	<i>tulete</i>	<i>tulevad</i>
<i>elan</i>	<i>elad</i>	<i>elab</i>	<i>elame</i>	<i>elate</i>	<i>elavad</i>
<i>tunnen</i>	<i>tunned</i>	<i>tunneb</i>	<i>tunneme</i>	<i>tunnete</i>	<i>tunnevad</i>
<i>naeran</i>	<i>naerad</i>	<i>naerab</i>	<i>naerame</i>	<i>naerate</i>	<i>naeravad</i>
<i>tõusen</i>	<i>tõused</i>	<i>tõuseb</i>	<i>tõuseme</i>	<i>tõusete</i>	<i>tõusevad</i>
<i>söödan</i>	<i>söödad</i>	<i>söödab</i>	<i>söödame</i>	<i>söödate</i>	<i>söödavad</i>
<i>lukkan</i>	<i>lukkad</i>	<i>lukkab</i>	<i>lukkame</i>	<i>lukkate</i>	<i>lukkavad</i>
<i>õmblen</i>	<i>õmbled</i>	<i>õmbleb</i>	<i>õmbleme</i>	<i>õmblete</i>	<i>õmblevad</i>

The paradigm of the verb *olema* 'to be' is exceptional in having the form *on* ~ *on* for both the third person singular and plural, cf.

<i>olen</i>	<i>oled</i>	<i>on</i>	<i>oleme</i>	<i>olete</i>	<i>on</i>
-------------	-------------	-----------	--------------	--------------	-----------

The affirmative impersonal present indicative forms have a formative consisting of the impersonalizer *-a-*, *-da-* or *-ta-* and the marker *-kse* for the present tense. The negative impersonal present indicative forms end in the impersonalizer *-da* or *-ta*, e.g. *ollakse* 'someone is' : *ei olda* 'someone is not', cf. 3.6.1.

### The imperfect

The affirmative personal imperfect forms have the tense markers *-i* or *-si* and in the first and the second person forms of the singular and in the plural. For the third person singular, the markers are *-i*, *-s*, or *-is*; the form has no personal ending. The marker *-i* occurs with verbs with a long monophthong other than *ii*, *ee*, and *üü* and with a group of verbs with the *e*-stem, namely *olema* 'to be', *tulema* 'to come', *panema* 'to put', *surema* 'to die', *tegema* 'to do', and *nägema* 'to see'. At that the long vowels *aa* and *ää* are replaced by the short *a* and *ä*, and the long vowels *oo* and *öö* by *õ*; the stem vowel *e* is lost. Verbs with a weakening *a*-stem and a long initial syllable, as well as the *e*-stem verb *tundma*, take the marker *-is* in the third person singular; all the other verbs take the marker *-s*. All the verbs with the markers *-is* and *-s* in the third person singular take the marker *-si-* in other imperfect forms.

There is no special negative imperfect form. Negation is expressed by a compound form having the pattern NEGATION PARTICLE *ei* + PERSONAL PAST PARTICIPLE, e.g. *ei 'olnud* 'was not, were not'

Affirmative impersonal imperfect forms contain a formative consisting of the impersonalizer *-d-* or *-t-* followed by the preterite marker *-i*, cf. 3.6.1. The corresponding negative forms are compound forms containing the negation particle *'ei* and the impersonal past participle, cf. 3.6.4, e.g. *'oldi* 'someone was': *ei 'oldud* 'someone was not'

The imperfect forms of verbs with weakening or strengthening gradation are in the strong grade. The quantity of verb forms with a monosyllabic stem depends on the number of syllables:

1Sg	2Sg = 3Pl	3Sg	1Pl	2Pl
<i>sõin</i>	<i>sõid</i>	<i>sõi</i>	<i>sõime</i>	<i>sõite</i>
<i>'käisin</i>	<i>'käisid</i>	<i>'käis</i>	<i>'käisime</i>	<i>'käisite</i>
<i>'egin</i>	<i>'egid</i>	<i>'egi</i>	<i>'egime</i>	<i>'egite</i>
<i>'tulin</i>	<i>'tulid</i>	<i>'tuli</i>	<i>'tulime</i>	<i>'tulite</i>
<i>elasin</i>	<i>elasid</i>	<i>elas</i>	<i>ela sime</i>	<i>ela site</i>
<i>'tundsin</i>	<i>'tundsid</i>	<i>'tundis</i>	<i>'tundsime</i>	<i>'tundsite</i>
<i>'naersin</i>	<i>'naersid</i>	<i>'naeris</i>	<i>'naersime</i>	<i>'naersite</i>
<i>'tõusin</i>	<i>'tõusid</i>	<i>'tõusis</i>	<i>'tõusime</i>	<i>'tõusite</i>
<i>söötsin</i>	<i>söötsid</i>	<i>söötis</i>	<i>söötsime</i>	<i>söötsite</i>
<i>'lökkasin</i>	<i>'lökkasid</i>	<i>'lökkas</i>	<i>'lökka sime</i>	<i>'lökka site</i>
<i>'õmblesin</i>	<i>'õmblesid</i>	<i>'õmbles</i>	<i>'õmble sime</i>	<i>'õmble site</i>

## THE CONDITIONAL

The CONDITIONAL mood is used to express the speaker's opinion that an event or an action should have occurred or not occurred or would or would not occur under certain conditions (*'Kui sul 'oleks 'rohkem 'raha, 'võiksid 'täna 'odavalt saada 'selle 'raamatu* 'If you **had** more money, **you could** get that book cheaply today', *'Räägiksin 'vaiksemalt, kui 'kuulaksid* 'I **would speak** more softly if **you (Sg) would listen**'). The conditional is also used to show that the occurrence or non-occurrence of a situation or an action is obligatory or preferable (*'Räägiksin 'nüüd 'tõtt* 'I **would tell** the truth now', *On 'vaja, et 'iga 'üks 'oleks 'siin* 'It is necessary that everybody **be** here').

The present conditional forms take the marker *-ks* in the third person singular; in other forms the marker *-ksi* is used. In informal style the personal endings are omitted; in that case all the forms in the present conditional paradigm are identical. The negative verb form used with the preposed negative particle *ei* is identical with the third person form.

1Sg	2Sg = 3Pl	3Sg = Neg	1Pl	2Pl
<i>sööksin</i>	<i>sööksid</i>	<i>sööks</i>	<i>sööksime</i>	<i>sööksite</i>
<i>käiksin</i>	<i>käiksid</i>	<i>käiks</i>	<i>käiksime</i>	<i>käiksite</i>
<i>teeksin</i>	<i>teeksid</i>	<i>teeks</i>	<i>teeksime</i>	<i>teeksite</i>
<i>elaksin</i>	<i>elaksid</i>	<i>elaks</i>	<i>elak sime</i>	<i>elak site</i>
<i>tunneksin</i>	<i>tunneksid</i>	<i>tunneks</i>	<i>tunnek sime</i>	<i>tunnek site</i>
<i>naeraksin</i>	<i>naeraksid</i>	<i>naeraks</i>	<i>naerak sime</i>	<i>naerak site</i>
<i>tõuseksin</i>	<i>tõuseksid</i>	<i>tõuseks</i>	<i>tõusek sime</i>	<i>tõusek site</i>
<i>söödaksin</i>	<i>söödaksid</i>	<i>söödaks</i>	<i>söödak sime</i>	<i>söödak site</i>
<i>lökkaksin</i>	<i>lökkaksid</i>	<i>lökkaks</i>	<i>lökkak sime</i>	<i>lökka site</i>
<i>õmbleksin</i>	<i>õmbleksid</i>	<i>õmbleks</i>	<i>õmblek sime</i>	<i>õmblek site</i>

Impersonal present conditional forms have a formative consisting of the impersonalizer *-da-* or *-ta-* and the conditional marker *-ks*. The negative form is a compound, consisting of the negative particle *ei* and the corresponding impersonal present conditional form, e.g. *oldaks* 'would be' : *ei oldaks* 'would not be'

The simple past conditional denotes an action or process that could have taken place in the past (*Olnuksin ma noorena targem, ei oleks ma praegu haige* 'If I were wiser when I was young, I would not be ill now'). The personal affirmative simple past forms are formed on the basis of past participles, cf. 3.6.1. Personal endings can be omitted in the pattern VERB STEM + PRETERITE MARKER *-nu-* + CONDITIONAL MARKER *-ks* + PERSONAL ENDING. In that case the corresponding negative forms take no personal endings and must be used with the corresponding personal pronoun (e.g. *olnuksin* 'had I been' : *ma ei olnuks* 'I would not have been'). The synonymous compound forms are much more popular than the simple past conditional forms, cf. 3.6.3.

## THE IMPERATIVE

The IMPERATIVE expresses the speaker's request, order, or prohibition to the listener(s) (*Ärge enam rääkige, kuulake mõlemad* 'You (Pl) don't speak any more, you both listen!') or his call for a joint action (*Rääkigem nüüd!* 'Let us speak now!'). The first person plural forms belong to the high style. In the neutral style the first person plural forms of the present indicative forms are used instead, but the first person plural personal pronoun has to be omitted (*Räägime nüüd!*).

In the imperative, there is no first person singular form and no third person forms. The second person singular form is unmarked. The verbs with weakening gradation are represented by their weak-grade stem; those with a strengthening stem take a strong-grade stem.

The second person plural form has the markers *-ge* or *-ke*. In the high style, the same marker occurs in the high style first person form, which has a unique personal ending *-m*. Both the forms of the first and second person plural take the marker *-ge* after (a) a monosyllabic vocalic stem, (b) after a consonantal stem allomorph of *e*-stem verbs *olema* 'to be', *tulema* 'to come', *minema* 'to go', *panema* 'to put', *surema* 'to die', *tegema* 'to do', *nägema* 'to see', (c) after a vocalic strong-grade stem of a verb with weakening gradation, (d) after a vocalic stem of a gradationless verb, (e) after a weak-grade consonantal stem with strengthening gradation ending in a resonant. Consonantal stems ending in a stop, *s*, or *h* and verbs with strengthening gradation having a vocalic weak-grade stem take the marker *-ke* in the first and second person plural forms.

In the neutral style the first person plural forms of the present indicative are used instead of the imperative mood forms without the first person plural personal pronoun.

Negation in the imperative mood implies prohibition. Prohibition is expressed by means of personal imperative forms of the special (auxiliary) prohibition verb, cf. 2Sg *ära*, 1Pl *ärgem*, 2Pl *ärge*. In the first person plural, however, the prohibition verb usually takes the general personal ending *-me*. The prohibition verb usually agrees with the main verb in person and number, cf. *'ärgem oodakem* ~ *'ärme ootame* 'let's not wait', *ärgem min-gem* ~ *'ärme 'läh(e)me* 'let's not go' and the corresponding negative present indicative forms *me ei 'oota* 'we don't wait', *me ei 'lähe* 'we don't go'

2Sg	1Pl	2Pl	Jussive	Quotative
<i>söö</i>	<i>söögem</i>	<i>sööge</i>	<i>söögu</i>	<i>söövät</i>
<i>käi</i>	<i>käigem</i>	<i>käige</i>	<i>käigu</i>	<i>'käivat</i>
<i>tee</i>	<i>tehkem</i>	<i>'tehke</i>	<i>'tehku</i>	<i>'tegevat</i>
<i>ela</i>	<i>elagem</i>	<i>'elage</i>	<i>'elagu</i>	<i>'elavat</i>
<i>tunne</i>	<i>tundkem</i>	<i>'tundke</i>	<i>'tundku</i>	<i>'tundvat</i>
<i>naera</i>	<i>naergem</i>	<i>naerge</i>	<i>naergu</i>	<i>'naervat</i>
<i>tõuse</i>	<i>'tõuskem</i>	<i>'tõuske</i>	<i>'tõusku</i>	<i>'tõusvat</i>
<i>sööda</i>	<i>söötkem</i>	<i>söötkе</i>	<i>söötku</i>	<i>söötvat</i>
<i>lükka</i>	<i>'lükakem</i>	<i>'lükake</i>	<i>'lükaku</i>	<i>'lükavat</i>
<i>õmble</i>	<i>'õmmelgem</i>	<i>'õmmelge</i>	<i>'õmmelgu</i>	<i>'õmblevat</i>

## THE QUOTATIVE

The QUOTATIVE is used when the speaker wants to point out that (s)he is not responsible for the accuracy of a statement but acts only an intermediary or reporter (*'Sina rääkivat saksa 'keelt* 'You (Sg) are said to speak German').

The quotative has the marker *-vat*. As the quotative forms have no personal ending, they are used with the corresponding personal pronoun (e.g. *ta olevat* 'he is reported to be' : *ta ei olevat* 'he is reported not to be').

The simple past quotative is sometimes used as a substitute for the compound past quotative, cf. 3.6.4 ('*Ta läinuvat korra jala pea linna* 'He is reported to have gone once on foot to the capital'). The personal simple past forms are formed on the basis of past participles, cf. 3.6.5, according to the pattern VERB STEM + PRETERITE MARKER *-nu-* + QUOTATIVE MARKER *-vat* (e.g. *me olnuvat* 'we are reported to have been' : *me ei olnuvat* 'we are reported not to have been').

In traditional narrative texts (tales) past events are reported by means of past participles: *Kord üks mees ehitanud maja* 'Once (upon the time) a man was reported to have built (personal participle) a house', *Vanasti püütud siit jõest vähki* 'In old times crayfish was reported to have been caught in this river'

## THE JUSSIVE

The JUSSIVE expresses either (a) deontic necessity, i.e. that one is compelled to do or not to do something ('*Võiksid nüüd kuulata, mina korraku seda mitu korda!* 'You might listen now, why should I repeat it several times', '*Mingu arsti juurde, kui valu üle ei lähe* 'He should go to the doctor if the pain does not stop'), (b) concession ('*Olgu ta haja meelne, aga ta on andekas* 'He could be absent-minded, but he is talented') or (c) the listener(s) should mediate a request, order, or prohibition ('*Tulen kell viis, Mari oodaku mind* 'I'll come at five o'clock, tell Mary to wait for me!').

The jussive mood has the markers *-ku* and *-gu* in the present tense for all persons. Their occurrence is analogical to that of the imperative markers *-ke* and *-ge*.

Jussive has simple past forms that developed from the past participles. The past form is usually used with the particle *eks*: *Eks tulnud õigel ajal koju* 'You should have come home in time', *Eks jäetud mulle kiri uksele* 'Someone should have left a note for me on the door'

### 3.6.3. The affirmative and the negative

The AFFIRMATIVE is characterized by obligatory or optional personal endings in the personal indicative and conditional mood forms and by specific tense markers in the impersonal indicative mood forms.

The NEGATIVE includes complex forms (a) consisting of the negation particle *ei* in the present indicative, conditional, and quotative moods and a special form of the main verb that is marked only for voice, mood, or tense (*ma ei 'kuula* 'I don't listen', *ma ei 'kuulaks* 'I would not listen', *ma ei 'kuulavat* 'I am reported not to listen') and (b) consisting of a form of the defective prohibition verb in the imperative and jussive moods (Imp1Sg *ära*, Imp1Pl *ärgem* ~ (neutral) *ärme*, Imp2Pl *ärge* and jussive *ärgu*, cf. *'ära 'kuula* 'don't listen', *ärgem 'kuulakem* ~ *'ärme 'kuulame* 'let us not listen', *'ärgu 'kuulaku* 'I/you/he/we/they be not listening') and the corresponding personal form that is preceded by the corresponding mood form of the main verb.

### 3.6.4. Compound tenses

Compound tenses include finite forms of the verb *olema* 'to be' and the past participle of the main verb.

Except the indicative compound tenses, where the present and imperfect tense forms call for a distinction between two compound tenses, the corresponding compound forms including the conditional, quotative, and jussive forms of the verb *olema* 'to be' have been referred to as the general past tense of the corresponding moods.

#### THE INDICATIVE: THE PERFECT AND THE PLUPERFECT

The indicative simple past tense has been traditionally called the IMPERFECT, and the compound past tenses containing the present and past tense forms of the auxiliary verb *olema* 'to be' are called the PERFECT and the PLUPERFECT. Among the three past tenses, the imperfect expresses an unlimited past action or progress. The perfect expresses an action or process that has taken place up to the present moment while the pluperfect expresses an action or process that had taken place up to a certain moment in the past. Despite the names, the aspectual meanings of the imperfect, perfect, and pluperfect indicative as well the present indicative forms, can be identified only in a sentence, cf. the following sentences with the verb forms in (a) the present, (b) the imperfect, (c) perfect, and (d) the pluperfect tense, where, usually, it is the object case that carries the necessary information about whether the action is completed:

- (a) *Ma 'kirjutan 'üht(e) raamatut* 'I am writing a book (PSg)'  
*Ma 'kirjutan 'ühe raamatu* 'I'll write a book (GSg)'
- (b) *Ma 'kirju'tasin 'üht(e) raamatut* 'I was writing a book (PSg)'  
*Ma 'kirju'tasin 'ühe raamatu* 'I wrote a book (GSg)'
- (c) *Ma 'olen 'kirju'tanud 'üht(e) raamatut* 'I have been writing a book (PSg)'  
*Ma 'olen 'kirju'tanud 'ühe raamatu* 'I have written a book (GSg)'
- (d) *Ma 'olin 'kirju'tanud 'üht(e) raamatut* 'I had been writing a book (PSg)'  
*Ma 'olin 'kirju'tanud 'ühe raamatu* 'I had written a book (GSg)'

## THE COMPOUND PAST CONDITIONAL

The compound past conditional forms consist of a personal present conditional form *oleks* of the auxiliary verb *olema* 'to be' and the personal past participle of the main verb in the personal voice (e.g. *ma 'oleksin 'olnud* 'I would have been' *ma 'ei 'oleks 'olnud* 'I would not have been', *me 'oleksime 'teinud* 'we would have done' : *me 'ei 'oleks 'teinud* 'we would not have done') and from the construction of the present conditional form *oleks* of the verb *olema* 'to be' and the impersonal past participle of the main verb in the impersonal voice (e.g. *'oleks 'oldud* 'would have been' : *'ei 'oleks 'oldud* 'would not have been').

## THE COMPOUND PAST QUOTATIVE

The compound past quotative forms consist of the present quotative form *'olevat* of the auxiliary verb *olema* 'to be' and the personal past participle of the main verb in the personal voice (e.g. *'olevat 'olnud* 'reported as having been': *ma 'ei 'olevat 'olnud* 'I am reported as having not been') and of the present quotative form *'olevat* of the auxiliary verb *olema* 'to be' and of the impersonal past participle of the main verb in the impersonal voice (e.g. *'olevat 'oldud* 'reported as having been' *'ei 'olevat 'oldud* 'reported as having not been').

## THE COMPOUND PAST JUSSIVE

The compound past jussive forms consist of the present jussive form *olgu* of the auxiliary verb *olema* 'to be' and the personal past participle of the main verb (e.g. *ta 'olgu 'teinud* 'he should have done'), the present jussive form *olgu* and the impersonal past participle of the main verb (*'Olgu 'tehtud*

*‘vigu, aga ‘elu ‘läheb ‘edasi ‘Although mistakes **were made**, but life goes on’).*

### 3.6.5. Non-finite forms

Non-finite forms include the participles, the supine, the infinitive, and the gerund, cf. Table 23.

#### PARTICIPLES

Participles can be personal or impersonal, cf. *‘valvav ‘mees* ‘the guarding man’ and *‘valvatav ‘mees* ‘the man who is guarded’, *‘valvanud ‘mees* ‘the man who has guarded’ and *‘valvatud ‘mees* ‘the man who has been guarded’

The present personal and impersonal participles follow the patterns

STEM + MARKER OF PRESENT TENSE *-v(a)* and

STEM + IMPERSONALIZER + PRESENT TENSE MARKER *-v(a)*

The marker *-v(a)* is obviously related to the formatives *-b* and *-vad* despite certain differences that reduce possible ambiguity, cf.

	<i>‘sööma</i> ‘to eat’		<i>õppima</i> ‘to learn’		<i>andma</i> ‘to give’		<i>‘lükka</i> ‘to push’	
	Sg	Pl	Sg	Pl	Sg	Pl	Sg	Pl
Pr3	<i>sööb</i>	<i>söövad</i>	<i>õpib</i>	<i>õpivad</i>	<i>annab</i>	<i>annavad</i>	<i>‘lökkab</i>	<i>‘lökkavad</i>
PrPle	<i>sööv</i>	<i>söövad</i>	<i>õppiv</i>	<i>õppivad</i>	<i>andev</i>	<i>andvad</i>	<i>‘lökkav</i>	<i>‘lökkavad</i>

In the nominative singular forms of Q3 of disyllabic stems with weakening gradation, the stem vowel *a* is replaced by *e* before the marker.

PRESENT PARTICIPLES function similarly to adjectives, occurring as attributes and predicatives and are inflected for case and number.

PAST PARTICIPLES have the formatives *-nud* for personal participles and *-dud* or *-tud* for impersonal participles, cf. 3.6.1 on the relations of *-d-* and *-t-*. In addition to acting as attributes or predicatives, past participles are regularly used to build compound tense forms together with finite forms of the verb ‘to be’, notably the perfect and pluperfect indicative, past conditional, past quotative and past jussive, cf.

- (1) *‘Kütt on ‘haavanud ‘hunti* ‘A hunter has wounded the wolf’
- (2) *‘Kütt oli ‘haavanud ‘hunti* ‘A hunter had wounded the wolf’

- (3) *Hunti on haavatud* 'The wolf has been wounded (by someone)'  
 (4) *Hunti oli haavatud* 'The wolf had been wounded (by someone)'  
 (5) *Hunt on haavatud* 'The wolf is wounded'  
 (6) *Hunt oli haavatud* 'The wolf was wounded'

Sentences (1) and (2) have predicates in the third person singular of the perfect indicative and pluperfect indicative and an object *hunti* in the partitive singular. Similarly, the predicates in sentences (3) and (4) are in the perfect indicative and pluperfect indicative and an object *hunti* in the partitive singular. The predicates are in the impersonal voice only in these cases. In sentences (5) and (6) the predicates are in the present indicative and imperfect (i.e. in the past indicative); the subject *hunt* in nominative singular, *haavatud* being a predicative complement.

## SUPINE

Supine forms usually function as adverbials but may fulfil also other syntactic functions. Semantically, the local case forms of supine have a joint local and finality function: the illative form indicates entering a process (*Lähen malet mängima* 'I'll go to play chess', *Hakka lugema!* 'Start reading!'). The inessive form expresses being in a process (*Olin klubis malet mängimas* 'I was in the club playing chess' ~ 'I had gone to the club to play chess', *Ma leidsin ta külmast värisemas* 'I found him shivering with cold'). The elative form expresses departure from a process (*Tulen malet mängimast* 'I come from playing chess') or end of a continuous process (*Süda lakkas tuksumast* 'The heart stopped beating'). The translative form is used only to express a purpose (*Oled liiga vana vale tamaks* 'You are too old for lying'). The abessive form expresses an non-performed obligatory action (*Palk on ikka maksmata* 'The salary is still unpaid', *Ära lahku söömata!* 'Don't leave without eating!', *pese mata tassid* 'unwashed cups').

The impersonal supine is used only together with the indicative or conditional verb forms *peab* 'must', *pidi* 'had to' and *peaks* 'should'. *Seda peab söödama* 'It must be eaten', *Seda peaks söödama* 'It should be eaten'

As the illative form of the personal supine is always in the strong grade, it has been the traditional headword for verbs in Estonian dictionaries.

## INFINITIVE AND GERUND

Infinitives mainly serve as subjects ('*Lugeda on 'meeldiv* 'To read is pleasant') or objects ('*Püüame 'aidata* 'We try to help'). Gerunds serve as adverbials indicating a parallel action or process ('*Oodates 'rongi ma 'lugesin* '(While) waiting for the train, I was reading', '*Lugedes ei 'kuulnud ma 'midagi* '(While) reading, I did not hear anything', '*Mees norskab 'magades* 'The man snores while sleeping').

In certain cases the use of the illative supine or infinitive depends on the predicate verb, cf. *Ta peab ootama* 'He (nominative) must wait', *Tal tuleb oodata* 'He (adessive) has to wait'

The infinitive has the formatives *-a*, *-da*, or *-ta*. The formative *-a* occurs (a) with monosyllabic vocalic stems ending in a diphthong or a long monophthong but not *aa*, *ee* and *äa* ('*süüa* 'to eat', '*juua* 'to drink', '*viia* 'to take away', '*käia* 'to walk'), (b) after consonantal stem allomorphs of disyllabic *e*-stems ('*olla* 'to be', '*tulla* 'to come', '*minna* 'to go', '*panna* 'to put', '*surra* 'to die', '*teha* 'to do', '*näha* 'to see', cf. the corresponding supines *olema*, '*tulema*, '*minema*, '*panema*, '*surema*, '*tegema*, '*nägema*), (c) with the shortened strong-grade stem allomorph of *a*- and *e*-stems with weakening gradation, having a long initial syllable and ending in a stop ('*tappa* 'to kill', '*anda* 'to give', '*tunda* 'to feel; to know', cf. the corresponding first person present forms *tapan*, *annan*, '*tunnen*).

The formative *-ta* occurs with monosyllabic consonant stem allomorphs ending in *s* of vocalic disyllabic *e*-stems with a short initial syllable or with weakening gradation ('*pesta* 'to wash', '*lasta* 'to let; to shoot', '*joosta* 'to run'), and with vocalic weak-grade stems of verbs with strengthening gradation ('*lükata* 'to push').

PastPle	Supine Ill	Supine Abe	Infinitive	Gerund
<i>söönud</i>	<i>'sööma</i>	<i>'söömata</i>	<i>'süüa</i>	<i>'süües</i>
<i>'käinud</i>	<i>'käima</i>	<i>'käimata</i>	<i>'käia</i>	<i>'käies</i>
<i>'teinud</i>	<i>'tegema</i>	<i>'tege mata</i>	<i>'teha</i>	<i>'tehes</i>
<i>'tulnud</i>	<i>'tulema</i>	<i>'tule mata</i>	<i>'tulla</i>	<i>'tulles</i>
<i>elanud</i>	<i>'elama</i>	<i>'ela mata</i>	<i>'elada</i>	<i>'elades</i>
<i>'tundnud</i>	<i>'tundma</i>	<i>'tundmata</i>	<i>'tunda</i>	<i>'tundes</i>
<i>naernud</i>	<i>'naerma</i>	<i>'naermata</i>	<i>'naerda</i>	<i>'naerdes</i>
<i>'tõusnud</i>	<i>'tõusma</i>	<i>'tõusmata</i>	<i>'tõusta</i>	<i>'tõustes</i>
<i>söötnud</i>	<i>'sööma</i>	<i>'söömata</i>	<i>'sööta</i>	<i>'söötes</i>
<i>'lükunud</i>	<i>'lükama</i>	<i>'lükka mata</i>	<i>'lükata</i>	<i>'lükates</i>
<i>'õmmelnud</i>	<i>'õmblema</i>	<i>'õmble mata</i>	<i>'õmmelda</i>	<i>'õmmeldes</i>

### 3.6.6. Verbal nouns

Estonian grammars include two (de)verbal nouns that are inflected both for case and number in the verb form system, namely the agent nouns (*nomen agentis*) in *-ja*, and the action noun (*nomen actionis*) in *-mine*, cf. *sööja* ‘eater’, *söömine* ‘eating’, *olija* ‘one in existence’, *olemine* ‘being’. Actually agent nouns belong to a more complicated system of agent and patient nouns resulting from a split of the former past participles, cf. *sööja* ‘eater (unspecified for time)’, *söönu* ‘one who has or had eaten’, *söödu* ‘sth or sb that is eaten’. In certain fossilized phrases attributive *ja*-derivates behave similarly to the present participles remaining nevertheless unspecified for time, cf. *‘haukuja koer* ‘barker dog, a dog that has the habit to bark a lot’, and *‘haukuv koer* ‘barking dog’

### 3.7. Adverbs

Adverbs may modify (a) a verb (proper adverbs, e.g. *‘jookse ruttu* ‘run quickly’), (b) an adjective or an adverb (grade adverbs, e.g. *‘väga vana* ‘very old’, *‘liiga noor* ‘too young’; *‘väga ruttu* ‘very quickly’, *‘hästi aeglaselt* ‘very slowly’), (c) a clause (modal adverbs, e.g. *Ta vist tuleb siia* ‘Perhaps he will come here’). Proper adverbs may form together with a verb the so-called phrasal or particle verbs (*‘Mehed jooksid esimesel võimalusel üle* ‘The men defected (literally: ran over) at the first opportunity’), cf. 4.2.1.

Proper adverbs can be classified on the basis of their meaning into adverbs of place and direction, adverbs of time, adverbs of manner, etc.

Local adverbs often have three case forms, viz. the directional, static, and separative forms, cf. 3.2, Table 17, depending on the direction of the verb’s action. In addition, some adverbs also have a terminative form, e.g. *‘koju* ‘(to) home (lative)’, *‘kodus* ‘at home (locative)’, *‘kodunt* ‘from home (separative)’; *alla* ‘down (directional)’, *all* (static), *alt* (separative); *‘üles* ‘up (directional)’, *‘üleval* (static), *‘ülevalt* (separative); *‘ette* ‘before (directional)’, *ees* (static), *eest* (separative); *taha* ‘behind (directional)’, *taga* (static), *tagant* (separative); *siia* ‘here (directional)’, *siin* (static), *siit* (separative), *siiani* ‘up to now, up to this point (terminative)’; *sinna* ‘there (directional)’, *seal* (static), *sealt* (separative), *sinnani* (terminative); *sisse* ‘in (directional)’, *sees* (static), *seest* (separative); *välja* ‘out (directional)’, *väljas* (static), *väljast* (separative); *kõikjale* ‘everywhere (directional)’, *kõikjal* (static), *kõikjalt* (separative).

The most frequent adverbs of time are *nüüd* ‘now’, *praegu* ‘now’, *kohe* ‘immediately’, *pärast* ‘after(wards)’, *siis* ‘then’, *varsti* ‘soon’, *ammu* ‘long

ago', *'hiljuti* 'lately', *varem(alt)* 'formerly', (*'üks*) *kord* 'once', *'äsja* 'just now, recently', *alati* 'always', *vahel* 'sometimes', *harva* 'rarely', *'iial ~ 'iialgi* '(n)ever', *just* 'just', *vara* 'early', *'hilja* 'late', *eile* 'yesterday', *täna* 'today', *homme* 'tomorrow', *mullu* 'last year', *tänavu* 'this year', *öösel ~ öösi* 'at night'

Adverbs of manner often end in suffixes *-sti* or *-lt* and have specific comparative forms in *-mini* and superlative forms in *-imini* (*'kiiresti ~ 'kiirelt* 'quickly', *'kiire mini* 'more quickly', *'kiirei' mini* 'most quickly'). The adverbs *'hästi* 'well' and *palju* 'many; much' have suppletive comparative and superlative forms, cf. *pare mini* 'better' and *pari' mini* 'best', *enam* or *'rohkem* 'more' and *enim ~ 'kõige enam* or *'kõige 'rohkem* 'most'. One part of manner adverbs have two case forms; one occurs with verbs indicating the process of transforming into a certain state; another occurs with verbs indicating being in the state, cf. (*'läheb*) *pilve* '(it becomes) cloudy' and (*on*) *'pilves* '(it is) cloudy'

On the other hand, it is possible to extract from concrete adverbs several abstract classes. So it is possible to speak about pro-adverbs that serve as substitutes for adverbials or other adverbs, which can be classified into reflexive (*'ise* 'oneself'); reciprocal (*'oma vahel ~ 'ise'keskis* 'between oneself', *vastas'tikku* 'mutually'); demonstrative (*'siia, siin, siit, siiani* 'here'; *sinna, seal, sealt, 'sinnani* 'there'; *siia'poole, siin pool* 'in this direction', *siit'poolt* 'from this direction'; *sinna poole, 'seal'pool* 'in that direction over there', *'sealt'poolt* 'from that direction'; *siis* 'then', *sellal* 'then'; *nii ~ nõnda* 'so, this way', *teisiti* 'otherwise'; *nii'võrd ~ seda võrd* 'so much (as)'; *see pärast ~ selle pärast ~ see'tõttu ~ selle'tõttu* 'therefore'; *nagu nii* 'anyway'; *siiski* 'however; nevertheless'); interrogative-relative (*'kuhu* 'where (to)', *'kus* 'where', *'kust* 'from where', *millal* 'when', *'kunas* 'when', *'kuidas* 'how', *miks* 'why'; *milleks* 'what for'); indefinite (*'kuhugi ~ 'kuskile, 'kuskil, 'kuskilt* 'somewhere'; *'kusa'gile, 'kusagil, 'kusagilt* 'somewhere'; *'kunagi* 'sometime', *millalgi* 'sometime', *'kuidagi* 'somehow', *kuigi* 'although', *'kuigi'võrd* 'somewhat', *millegi'pärast* 'for some reason').

### 3.8. Adpositions (post- and prepositions)

Many prepositions and postpositions are identical with adverbs. There are more postpositions than prepositions. Some words act as both prepositions and postpositions, e.g. *'läbi, 'üle, ümber, mööda*. Their meanings are often different depending on whether they occur as prepositions or postpositions (*'läbi puu* 'through the tree', *puu 'läbi* 'because of the tree'; *'üle silla* 'across the bridge', *silla 'üle* 'concerning the bridge') or, more rarely, iden-

tical (*üumber sõrme ~ sõrme üumber* 'round the finger'; *mööda teed ~ teed mööda* 'along the way').

### 3.9. Conjunctions

The most frequent conjunctions are *ja* 'and', *ning* 'and', *ehk* 'or', *või* 'or', *aga* 'but', *vaid* 'but', *ent* 'but', *kuid* 'but', *ega* 'nor', *kui* 'if; when', *nagu* 'as', *kuigi* 'although', *et* 'that', *sest* 'because', *kuna* 'because, as, for', *nii*(*hästi*) ... *kui* (*ka*) 'both...and', *kas* ... *või* 'either...or', *ei* ... *ega* 'neither...nor'

## 4. Word formation

Word formation in Estonian includes word derivation and compounding. Both methods of word formation are only partially regulated by grammar. Only a few derivational suffixes form stems that make a well-definable stem class and are actively used. Similarly, only a small part of compounds is actively formed. Both derived stems and compounds are inflected. Sometimes the last component of a compound may undergo derivation. Usually it is the last component in a compound that is inflected. The inflection of cardinal numerals is an important exception of the general rule, cf. 3.4.

### 4.1. Derivation

Derivation includes the conversion of lexical units (a) from one part of speech into another, for example, nominalization of verbs and verbalization of nominals, adverbs and adpositions and (b) from one subcategory of nominals into another or from one subcategory of verbs into another by means of adding a derivational suffix to a base stem.

Converting lexical units from one part of speech into another may occur without adding any derivational suffixes to the base stem (*tagama* 'to guarantee' from *taga* 'behind', *lābima* 'penetrate' from *läbi* 'through'). Often such suffixless conversion is called DIRECT DERIVATION. Several cases of what today look like suffixless conversion result from historical sound losses that have annihilated some former derivational suffixes (e.g. for *vaev* 'trouble', GSg *vaeva* and *vaevama* 'to trouble', 3Sg *vaevab*, the verb stem has lost its third, suffix syllable). Several other cases may result from borrowing from other languages both the related suffixless noun and the verb stem (e.g. this

is probably true for *'kamm* 'comb', GSg *'kammi* and *'kammima* 'to comb', 3Sg *'kammib*).

A derivational suffix often builds new words (a) belonging to a variety of meaning groups and even to different noun and verb classes and (b) from base stems, including compound stems, belonging to different parts of speech. Resulting from the different age of related derivatives, especially from semantic shifts among older derivatives, the meanings of most derivational suffixes are ambiguous and there are sets of suffixes whose meanings overlap. New derivatives often simply fill an existing gap in the set of hitherto exploited stem and suffix combinations, other theoretically possible combinations already being used for other purposes. Because of these circumstances, derivational morphology is somewhat chaotic and the role of derivational suffixes somewhat accidental, cf. e.g. Table 25. As many word stems have markedly different variants, the final parts of stems non-nominative case forms have often considered to be the initial parts of derivational suffixes and used in word derivation. There are also numerous so-called complex suffixes. Below are listed a number of most important suffixes.

#### 4.1.1. Derivation of verbs

Verb derivation includes derivation of verbs from nominals, adverbs, and verbs. Nominals and adverbs can be verbalized into (a) transitive causative, resultative, instructive, instrumentative, essential, privative reciprocal verbs, and (b) intransitive factitive, transitive, reflexive, automative captative, and reciprocal verbs. Derivation of verbs from verbs includes (a) derivation of causative verbs from non-causative verbs, (b) derivation of non-causative verbs, notably derivation of reflexive and automative verbs from causative verbs, and (c) modifying derivation of continuative, momentaneous, and frequentative verbs from each other.

Derivation of verbs is to a great extent amorphous. Not all denominal derivatives contain a derivative suffix (*'kiiluma* 'to wedge', 3Sg *'kiilub* from *'kiil* 'wedge', GSg *'kiilu*). On the other hand, many denominal and deadverbial verbs, both transitive and intransitive, are derived by means of the suffix *-(t)ta-* ~ *-da-*, which derives new verbs of different classes from nominals and adverbials, and causative verbs from non-causative verbs. In addition this suffix occurs as a component of several secondary suffixes (*-lda-*, *-elda-*, *-nda-*, *-enda-*, *-rda-*, *-erda-*). The suffix *-(t)ta-* ~ *-da-* has four variants: (a) *-tt-* : *-t(a)-* after a short vowel of the initial syllable (*'jätma* 'to leave', 3Sg *'jätab*, Inf *'jätta*), (b) *-t-* : *-da-* after a long vowel or diphthong of the initial syllable (*'keetma* 'to boil (vt)', 3Sg *'keedab*, Inf *'keeta*), (c) *-da-* after *l*, *n* and

**Table 25.** Verbs and nouns derived from adjectives  
expressing colours and temperature

Adjective X (NSg : GSg)	Gloss	'looks/ feels X'	'becomes (more) X'	'causes becoming (more) X'	'property of being X'
'punane : 'punase	'red'	'punab 'punetab 'punerdab	'punastab		'puna
'kollane : 'kollase	'yellow'	'kollendab	'kolletab 'kolletub		'kollasus
'rohe 'line rohe 'lise	'green'	'rohetab 'rohendab			'rohelus
'haljas : 'halja	'plant green'	'haljendab	'haljub	'haljastab	'haljus
'sinine : 'sinise	'blue'	'sinab 'sinetab 'sinendab 'sinerdab	'sinetub		'sina
'valge 'valge	'white'	'valendab	'valgeneb <sup>2</sup>	'valgendab	
'roosa : 'roosa	'pink'	'roosatab	'roosatub		
'pruun : 'pruuni	'brown'		'pruunistub	'pruunistab	
'hall : 'halli	'grey'	'hallendab	'hallistub 'hallub 'hallineb <sup>2</sup>		'hallus
'must : 'musta	'black'	'mustab <sup>1</sup> 'mustendab	'mustub 'musteneb <sup>2</sup>	'mustab <sup>1</sup>	
'ere 'ereda	'bright'	'eretab 'erendab	'ereneb <sup>2</sup>		'eredus
'kahvatu 'kahvatu	'pale'		'kahvatab 'kahvatub		'kahvatus
'hele : 'heleda	'light'	'helendab	'heleneb <sup>2</sup>		'heledus
'tume : 'tumeda	'dark'	'tumendab	'tumestub 'tumeneb <sup>2</sup>	'tumestab 'tumendab <sup>3</sup>	'tumedus
'kül'm : 'külma	'cold'	'külmetab	'külmeneb <sup>2</sup>	'külmutab	'kül'mus
'jahe : 'jaheda	'cool'		'jahtub 'jaheneb <sup>2</sup>	'jahutab	'jahedus
'leige : 'leige	'lukewar m'		'leigub 'leigeneb <sup>2</sup>		'leigus
'soe : 'sooja	'warm'		'soojeneb <sup>2</sup>	'soojendab <sup>3</sup>	'soojus
'kuum : 'kuuma	'hot'	'kuumab <sup>1</sup>	'kuumeneb <sup>2</sup>	'kuumutab 'kuumendab <sup>3</sup>	'kuumus

Notes. <sup>1</sup> A so-called contracted verb whose formerly trisyllabic stem contained in its third syllable a factitive suffix \*-ta-, preceded by the vowel \*a, whose stop was weakened and lost, triggering the vowel contraction. <sup>2</sup> The verb may have a translative meaning 'becomes more X'. <sup>3</sup> The verb has the general meaning 'causes becoming more X' and constitutes a pair with the corresponding translative verb.

*r* ('*vähen* **dama** 'to lessen, to decrease (vt)'), (d) unalternating *-ta-* elsewhere ('*kasva* **tama** 'to grow (vt)'). Note that alongside the variant *-da-* of *-ta-* there exists also the independent derivational suffix *-d-* *-a-* ('*võidma* 'to anoint; to butter' : *võian*, Inf *võida*). Similarly, the corresponding non-causative suffix *-tu-* varies with *-du-* after *l*, *n*, and *r* ('*keerduma* 'to twist (vi)').

A group of vocalic suffixes can be recognized only on the basis of the inflectional type of the derivatives, cf. (a) *-a-* in *ruttama*, 3Sg *ruttab*, Inf *rutata* 'to hurry' (from *rutt* 'hurry', GSg *rutu*) versus *nutma* 'to cry, to weep', 3Sg *nutab*, Inf *nutt/a*, (b) *-i-* in *jälgima*, 3Sg *jälgib*, Inf *jälgida* (from *jälg* 'footprint, track') versus *nülgima* 'to flay, to skin', 3Sg *nülib*, Inf *nülgida* and (c) *-u-* in *muutuma* 'to change (vi)', 3Sg *muutub*, Inf *muutuda* (from *muuta* 'to change (vt)', 3Sg *muudab*) vs. *puutu/ma* 'to touch', 3Sg *puudu/b*, Inf *puutu/da*.

Table 26 presents the major derived verb classes and derivational suffixes.

**Table 26.** Derivative classes of verbs and main derivational suffixes

	<i>-(t)ta-</i>	<i>-a-</i>	<i>-ka-</i>	<i>-nda-</i>	<i>-sta-</i>	<i>-lda-</i>	<i>-da-</i>	<i>-tse-</i>	<i>-(e)l(e)-</i>	<i>-i-</i>	<i>-ki-/gi-</i>	<i>-tle-</i>	<i>-bi-/bu-</i>	<i>-tu-</i>	<i>-stu-</i>	<i>-u-</i>	<i>-ne-</i>	<i>-(i)skle-</i>	<i>-ise-</i>	<i>-(i/u)tse-</i>	<i>-ata-</i>
<b>Transitive</b>																					
Causative	+	+																			
Factive	+	+	+	+						+		+									
Instructive	+				+																
Instrumentative	+						+	+	+	+											
Essential	+				+																
Privative					+					+											
Resultative	+				+																
<b>Intransitive</b>																					
Captative	+			+																	
Reflexive													+	+		+					
Automative	+				+					+			+	+	+	+					
Translative																	+				
Reciprocatve									+												
Continuative								+	+								+		+	+	
Frequentative									+		+							+			
Momentaneous																					+
Iterative										+											

Still in many cases the interrelations of verbal derivatives are ambiguous. For example, the automative verb '*kõver* **duma** 'to bend (vi)', 3Sg '*kõverdub* appeared relatively lately as a synonym of the older phrase '*kõveraks minema*,

3Sg *lāheb* 'kõveraks' 'bends; becomes crooked', lit. 'goes crooked (translative)' and as the intransitive counterpart of the transitive (factitive) verb 'kõver *dama* 'to bend, to curve, to crook' from the adjective 'kõver 'bent, crooked' Despite the historical primacy of the derivational pattern 'kõverdama → 'kõverduma, the verb is usually treated as a deadjectival derivative 'kõverduma. Such widespread ambiguity makes derivation more flexible and has led to the rise of new derivational suffixes.

## CAUSATIVE VERBS

A causative verb indicates causation of actions or state expressed by the base stem. Causative verbs are transitive verbs mainly derived from non-causative verbs ('jätma 'to leave', 3Sg 'jätab, Inf 'jätta from jääma 'to remain'; 'keetma 'to boil (vt)', 3Sg 'keedab, Inf 'keeta from keema 'to boil (vi)'; 'söötma 'to feed' from sööma 'to eat'; 'vähen *dama* 'to lessen, to decrease (vt)' from vähe *nema* 'to lessen, to decrease (vi)' or vähem 'less'; 'tolmel *dama* 'to pollinate, cause fertilization through pollen (vt)' from tolmlема 'to pollinate, to spread pollen (vi)', Inf 'tolmelda; 'kasva *tama* 'to grow (vt)' from kasvama 'to grow (vi)'; 'liigu *tama* 'to move (vt)' from liikuma 'to move (vi)'; 'suitse *tama* 'to smoke (vt)' from suitsema 'to smoke (vi)'; 'ragis *tama* 'to crackle (vt)' from ragi *sema* 'to crackle (vi)'; kuulama 'to listen', 3Sg 'kuulab, Inf 'kuulata from kuulma 'to hear', 3Sg 'kuuleb, Inf 'kuulda).

## FACTITIVE VERBS

A factitive verb indicates an action or process that creates, changes or has an affect on an object. Factitive verbs are transitive verbs mainly derived from (a) nouns ('kirju *tama* 'to write' from 'kiri 'pattern; script; letter', GSg 'kirja, PPl kirju; 'kasu *tama* 'to use' from 'kasu 'use'; 'maandama 'to land an aircraft' from maa 'land'; 'ketrama 'to spin', Inf 'kedrata from 'keder 'spin', GSg 'kedra, PSg 'ketra; 'varjama 'to conceal; to shelter', Inf 'varjata from vari 'shade; shadow; shelter', GSg varju, PSg varju; 'vihkama 'to hate', Inf 'vihata from viha 'anger'; 'töötlema 'to process', Inf 'töödelda from 'töö 'work'; 'sõlmima 'to tie, to knot (vt)' from sõlm 'knot', GSg sõlme), (b) adverbs ('koondama 'to concentrate' from 'kokku (Ill) 'together', Ine 'koos), (c) interjections ('eitama 'to deny' from 'ei 'no!', 'ptruutama 'to say whoa' from 'ptruu 'whoa' (pronounced as a long bilabial tremulant)).

Instructive, instrumentative, essential and privative verbs have often been considered factitive verbs, see below.

## INSTRUCTIVE VERBS

An instructive verb denotes provision of someone with the object or phenomenon expressed by the base stem. Instructive verbs are derived from nouns ('*kraavitama* 'to make ditches' from '*kraav* 'ditch', GSg '*kraavi*'; *vale'tama* 'to lie' from *vale* 'lie'; '*hirmu'tama* 'to frighten' from '*hirm* 'fear; fright', GSg '*hirmu*'; '*julgus'tama* 'to encourage' from '*julgus* 'courage'; '*kinnas'tama* 'to put on gloves' from '*kinnas* 'glove; mitten'; '*vöö'tama* 'to girdle' from '*vöö* 'girdle'; '*varus'tama* 'to supply' from *varu* 'supply').

## INSTRUMENTATIVE VERBS

An instrumentative verb denotes an action conformed by means of an instrument expressed by the base stem. Instrumentative verbs are derived from nouns ('*ahel'dama* 'to chain' from *ahel* 'chain'; '*ankur'dama* 'to anchor' from *ankur* 'anchor'; '*kannus'tama* 'to spur' from '*kannus* 'spur'; '*käru'tama* 'to push a wheelbarrow' from '*käru* 'wheelbarrow'; '*pussi'tama* 'to knife, to stab' from '*puss* 'sheath knife'; *võidma*, 3Sg *võian* 'to anoint' from *või* 'butter'; '*vihtlema* 'to whisk with a bunch of leafy twigs', Inf '*vihelda* from *viht* 'bunch of leafy twigs', GSg *viha*; '*õngit'seda* 'to angle' from *õng* 'fishing line', GSg *õnge*; '*nokkima* 'to peck, to pick', 3Sg '*nokib* from *nokk* 'bill, beak', GSg *noka*).

## ESSENTIAL VERBS

An essential verb denotes performing an action similarly to or as one expressed by the base stem. Essential verbs are derived from (a) nouns ('*meister'dama* 'to make' from *meister* 'master', '*tohter'dama* 'to cure' from '*tohter* 'physician', '*varas'tama* 'to steal' from '*varas* 'thief') and (b) adjectives ('*kades'tama* 'to envy' from '*kade* 'envious').

## PRIVATIVE VERBS

A privative verb expresses removal or withdrawal of something expressed by the base stem. Privative verbs are derived from nouns ('*nahas'tama* 'to skin (a furbearing animal)' from '*nahk* 'skin; fur', GSg *naha*; '*koorima* 'to debark; to peel; to hull; to skim' from *koor* 'bark; peel; cream', GSg '*koore*).

## RESULTATIVE VERBS

A resultative verb indicates an action having an intent to produce a certain object, phenomenon or property expressed by the base stem. Resultative verbs are derived from (a) nouns (*'silbi'tama* 'to syllabify' from *silp* 'syllable', GSg *silbi*; *'viilutama* 'to slice' from *viil* 'slice', GSg *viilu*; *'aurus'tama* 'to vaporize (vt)' from *aur* 'steam'; *'kivis'tama* 'to turn to stone, to petrify' from *'kivi* 'stone') and (b) adjectives (*'puhas'tama* 'to clean' from *puhas* 'clean'; *'täitma* 'to fill', 3Sg *'täidab* from *täis* 'full', GSg *'täie*; *'kahju'tustama* 'to deactivate; to defuse' from *'kahjutu* 'harmless'; *'kondi'tustama* 'to debone' from *'konditu* 'boneless'), (c) adverbs (*'paigal'dama* 'to install' from *paigale* '[to put] in the right place'), (d) postpositions (*'naja'tama* 'to lean' from *'najale* 'on, against').

## CAPTATIVE VERBS

A captative verb indicates obtaining the object expressed by the base stem: *'kalastama* 'to fish' from *'kala* 'fish', *'eines'tama* ~ *'eine'tama* 'to have a light meal' from *eine* 'light meal', *'lõunas'tama* 'to eat lunch' from *'lõuna* 'lunch; noon; south', *'õhtus'tama* 'to eat dinner' from *õhtu* 'evening'.

## REFLEXIVE VERBS

A reflexive verb expresses a volitional action or change whose target is the agent himself. Reflexive verbs are derived from nouns (*'ööbima* 'stay for the night' from *öö* 'night', *'maabuma* 'to land from a boat' from *maa* 'land', *'randuma* 'to come ashore' from *rand* 'shore'); from postpositions (*'na(j)al'duma* 'to lean against sth' from *najale* 'on, against'); from verbs (*'saabuma* 'to arrive' from *saama* 'to get, to receive', *'keelduma* 'to refuse' from *keelama* 'to prohibit', *'piirduma* 'to limit oneself (vi)' from *'piirama* 'to limit (vt)', *'pöörduma* 'to turn (vi)' from *'pöörama* 'to turn (vt)', *'riie'tuma* 'to dress oneself' from *riie'tama* 'to dress', *'viskuma* 'to throw oneself' from *'viskama* 'to throw').

## AUTOMATIVE VERBS

An automative verb indicates a process where the subject has the role of an inactive patient. Automative verbs are derived from nouns (*'ussi'tama* 'to be wormy' from *uss*, GSg *ussi* 'worm'; *'valu'tama* 'to ache' from *valu* 'pain';

*'hingel'dama* 'to pant, to be out of breath' from *'hing* 'breath', GSg *'hinge*; *poegima* 'to give birth to offspring (of animals)', 3Sg *'poegib* from *'poeg* 'son'; *'kivis'tuma* 'to petrify' from *'kivi* 'stone'; *'rasvuma* 'to become obese' from *rasv* 'fat, grease'), adjectives (*'haige/s'tu/ma* 'to become ill' from *'haige* 'ill', *'kõver'duma* 'to bend, to curve (vi)' from *'kõver* 'bent, crooked', *kõhnuma* 'to slim' from *'kõhn* 'slim'), adverbs (*'mööduma* 'to pass (vi); to go by' from *'mööda* 'past, by', *'taga'nema* 'to recede, to withdraw (vi)' from *'taga* 'back'), transitive verbs (*'joobuma* 'to get drunk, to become intoxicated' from *jooma* 'to drink', *'kanduma* 'to be carried' from *'kandma* 'to carry', *'karas'tuma* 'to be tempered' from *'karas'tama* 'to temper (vt)', *'sulguma* 'to shut (vi)' from *'sulgema* 'to shut (vt)'), and intransitive verbs (*'käibima* 'to be valid' from *'käima* 'to walk').

### RECIPROCATIVE VERBS

A reciprocal verb indicates a mutual action of several actors: *'võitlema* 'to fight', Inf *'võidelda* from *'võit* 'victory', GSg *'võidu* or *'võitma* 'to win', 3Sg *'võidab*. Several reciprocal derivatives with *-le-* contain a basic stem whose occurrence is unique or at least is felt to be unique (*'ame'lema* 'to sleep around', *'kaklema* 'to brawl, to fight', Inf *'kakelda*).

### TRANSLATIVE VERBS

A translative verb indicates becoming such as expressed by the base stem. Translative verbs are derived mostly from adjectives (*'pehme'nema* 'to soften (vi)' from *pehme* 'soft' or *'pehmem* 'softer', *'kõve'nema* 'to harden (vi)' from *'kõva* 'hard' or *'kõvem* 'harder', *'sage'nema* 'to become more frequent' from *sage* 'frequent', *'palju'nema* 'to multiply, reproduce itself' from *palju* 'many, much', *'teise'nema* 'to alter' from *'teine* 'other', *'rohke'nema* 'to become abundant (vi)' from *rohke* 'abundant, plentiful' or *'rohkem* 'more', *'vähe'nema* 'to lessen' from *vähe* 'little, few' or *'vähem* 'less'), and rarely from nouns (*'jagu'nema* 'to be divided into parts (vi)' from *'jagu* 'part').

### CONTINUATIVE VERBS

A continuative verb expresses an action, process or situation whose duration is unlimited. Continuative verbs are derived from (a) nouns (*'külgnema* 'to be located side by side' from *külg* 'side'; *'paiknema* 'to be located, to be situated' from *paik* 'place'; *'piirnema* 'to border' from *piir* 'border';

*'tugi'nema* 'to rest upon, to be based on' from *'tugi* 'support'; *mõnu'lema* 'to enjoy oneself' from *mõnu* 'delight, relish'; *'lõbut'sema* 'to have fun' from *'lõbu* 'fun, pleasure'; *muret'sema* 'to worry' from *mure* 'worry'; *pere'mehet'sema* 'to behave like a boss' from *pere'mees* 'master, boss', GSg *pere'mehe*), (b) adjectives (*'eri'nema* 'to differ' from *eri* 'different'; *'igav'lema* 'to idle, to feel bored' from *'igav* 'dull, boring'; *'tolat'sema* 'to behave like a fool' from *tola* 'fool'; *'ülbit'sema* 'to be arrogant' from *ülbe* 'arrogant'; *peenut'sema* 'to be priggish' from *peen* 'refined', GSg *peene*; *nukrut'sema* 'to be sad' from *nukker* 'sad, wistful', GSg *nukra*), (c) verbs (*'hoolit'sema* 'to care for, to take care of' from *'hoolima* 'to care (about)', *nokit'sema* 'to tinker' from *nokkima* 'to peck, to pick'), (d) from onomatopoeic or descriptive stems that mostly do not occur without a derivational suffix (*'vari'sema* 'to crumble; to collapse', *viri'sema* 'to grumble', *'väri'sema* 'to tremble; to shiver').

## FREQUENTATIVE VERBS

Frequentative verbs are derived from verbs and express a repeatedly performed action. The suffix *-le-* denotes an action that is considered aimless (*'hüplema*, Inf *'hüpelda* 'to skip (vi), to hop (vi)' from *'hüppama* 'to jump', Inf *'hüpata*; *kekslema* 'to hop around' from *'keksima* 'to hop'; *lendlema* 'to fly about', Inf *'lennelda* from *'lendama* 'to fly'; *tunglema* 'to throng' from *tungima* 'to penetrate, to invade'; *pekslema* 'to pound' from *peksma* 'to beat', *vaatlema* 'to observe; to watch' from *vaatama* 'to look'). *-skle-* derives frequentative verbs that usually express a non-intensive action: *olesk'lema* 'to idle' from *olema* 'to be'; *mõitisk'lema* 'to meditate' from *mõtlemä* 'to think'; *'teesklema* 'to pretend', Inf *'teeselda* from *'tegema* 'to do'

## ITERATIVE VERBS

An iterative verb denotes an action that consists of periodically recurrent components that can be rendered by corresponding momentaneous verbs (*'toksima* 'to peck' vs. *toksama* 'to give a peck'). Iterative verbs may be contrasted to similar frequentative verbs (*'keksima* 'to hop' vs. *'kekslema* 'to hop around'). Iterative verbs are often derived from nouns or sound imitations (*'keksima* 'to hop', *'keksib* from *keks* 'hop; hopscotch', GSg *'keksu*; *sulpsima* 'to plop' from *sulps* 'plop', GSg *sulpsu*).

## MOMENTANEOUS VERBS

A momentaneous verb denotes an action considered as single and covering a moment. Momentaneous verbs are derived from verbs and express a single rapid action: *'karja tama* 'to give a cry' from *'karjuma* 'to cry', *'kuula tama* 'to listen for a while' from *'kuulama* 'to listen', *'liiga tama* 'to instantly move oneself' from *'liigu tama* 'to move', *sulpsa tama* 'to instantly plop' from *sulpsama* 'to plop'

### 4.1.2. Nominalization of verbs

In addition to present participles that behave as adjectives and direct derivation of nouns from verb stems, there exist (1) nouns derived from verbs, mostly to denote an action or a process, its object, product, or means; a participant in an action, mostly an agent (or another active participant as experiencer or instrument) or a patient; the place of or for an action and (2) caritive adjectives derived from verbs to reveal that an action or state has never occurred or is impossible.

## ACTION AND PROCESS NOUNS

Action and process nouns include a wide range of nouns denoting an action, process, or state, the object of an action or process, the product of an action or process, or the means of an action. Alongside suffixes such as *-mine*, *-i*, *-u*, *-k*, *-in*, *-ng*, whose derivatives mostly denote general and instant actions, and suffixes such as *-e*, *-me*, *-is*, and *-m* whose derivatives denote the product or means of an action, different derivatives of the suffixes *-us* and *-e* cover the scale.

*-mine* : *-mise* derives general action nouns from all verbs, except two defective verbs, cf. *söömine* 'eating', GSg *söömise*, PSg *söömist* from *sööma* 'to eat'; *'kirjuta mine* 'writing' from *'kirju tama* 'to write'; *õpeta mine* 'teaching' from *õpe tama* 'to teach'; *ole mine* 'being' from *olema* 'to be'; *roosteta mine* 'rusting' from *rooste tama* 'to rust' Several grammars have presented such derivatives as *nomina actionis* together with verb forms.

*-i/Ø* : *-i* derives nouns denoting an action, its object or means from disyllabic *a*-stems: *külv* 'sowing; sown land' from *'külvama* 'to sow', *künd* 'ploughing; ploughed land' from *'kündma* 'to plow', *'lüps* 'milking; the amount milked' from *'lüpsma* 'to milk', and 'present; gift; talent' from *andma* 'to give'

*-u/Ø · -u* derives nouns expressing an event or state from disyllabic stems ('*elu* 'life' from *elama*; *sadu* 'rainfall; snowfall' from *sadama* 'to rain, to snow, to fall'; *olu* 'state of affairs, condition' from *olema* 'to be'; *jooks* 'run', GSg *jooksu* from *jooksma* 'to run'; *käsk* 'command, order', GSg *käsu* from *käskima* 'to command, to order'), sometimes a product ('*tulu* 'revenue' from *tulema* 'to come') or means ('*toit* 'food', GSg *toidu* from *toitma* 'to feed').

*-in : -ina* derives nouns expressing mostly a noise resulting of a characteristic action expressed by verbs with the derivational suffix *-ise-* ('*helin* 'ringing' from '*heli*' *sema* 'to ring (vi)').

*-k : -gi* derives nouns from monosyllabic vocalic stems. The stems express a process ('*müük* 'sale' from *müüma* 'to sell', *püük* 'fishing' from *püüdma* 'to catch'), an instance of an action ('*löök* 'blow, strike' from *lööma* 'to strike; to hit'), the object of an action ('*jook* 'drink; beverage' from *jooma* 'to drink', *söök* 'food, meal' from *sööma* 'to eat'), or the product ('*saak* 'yield, crop; catch; booty' from *saama* 'to get').

*-k : -ku* derives nouns expressing an instance action from disyllabic stems: *minek* 'departure' from *minema* 'to go', *tulek* 'arrival' from *tulema* 'to come', *rünnak* 'attack' from *ründama* 'to attack'

*-ng : -ngu* derives nouns expressing mostly an instance action from di- and trisyllabic verb stems and supines of monosyllabic vocalic stems ('*õping* 'study' from *õppima* 'to study'; *uuring* 'research' from *uurima* 'to research, to study'; *loeng* 'lecture' from *lugema* 'to read', 3Sg *loeb*; *sööming* 'meal' from *sööma* 'to eat'), sometimes a process ('*areng* 'development' from *are nema* 'to develop'), rarely a product ('*toodang* 'produce, production' from *tootma* 'to produce', 3Sg *toodab*).

*-e* (unalternating in nominative and genitive!) derives nouns expressing (a) a singular instance of an action or event ('*hüpe* 'jump' from *hüppama* 'to jump', '*katse* 'trial; experiment' from *katsuma* 'to try; to feel; to touch', '*kutse* 'call, invitation' from *kutsuma* 'to call, to invite', '*tõlge* 'translation' from *tõlkima* 'to translate, interpret', '*tõmme* 'pull' from *tõmbama* 'to pull', '*tõuge* 'push' from *tõukama* 'to push'), (b) rarely a general action ('*side* 'connection; communication' from *siduma* 'to tie, to bound, to link', *ränne* 'migration' from *rändama* 'to migrate', *teke* 'genesis, rise' from *tekkima* 'to come into being, to spring up'), (c) the product of an action or a process ('*rooste* 'rust', '*hinne* 'grade, mark (especially numerical)' from *hindama* 'to estimate, to assess, to evaluate, to grade', *kõide* 'binding; volume' from *kõitma* 'to bind', '*kutse* 'invitation', '*tõlge* '(a piece of) translation'), (d) a means of an action ('*kate* 'cover' from *katma* 'to cover', '*täide* 'filling' from *täitma* 'to fill', *side* 'bandage' from *siduma* 'to tie, to bandage').

*-us* : *-use* (after a disyllabic stem with a short initial syllable *-dus* : *-duse*) derives mostly nouns expressing (a) an action or process, derivatives being more abstract than those with *-mine*, often also the product of the action or process ('*kirjutus* 'writing' from '*kirju*'*tama* 'to write', '*õpetus* 'teaching; doctrine' from '*õpe*'*tama* 'to teach', '*kannatus* 'suffering; patience' from '*kanna*'*tama* 'to suffer'), (b) the product of an action ('*haridus* 'education' from '*harima* 'educate', '*luuletus* 'poem' from '*luule*'*tama* 'to write poetry'), (c) a means of an action ('*märkus* 'note' from '*märkima* 'to note', '*kütus* 'fuel' from '*kütma* 'to heat'), (d) the object of an action ('*omadus* 'property, quality' from '*omama* 'to own, to possess', '*vajadus* 'need, demand' from '*vajama* 'to need'). In addition, more abstract nouns can be derived from supines ('*olemus* 'essence' from '*olema* 'to be', '*tulemus* 'result' from '*tulema* 'to come') and from participles ('*sõltuvus* 'dependence' from '*sõltuv* '(being) dependent', '*veetlevus* 'appeal' from '*veetlev* 'appealing', '*kuuldavus* 'audibility' from '*kuuldav* 'audible', '*loodus* 'nature' from '*loodud* '(being) created', '*haritus* 'educatedness' from '*haritud* 'educated', '*kuuldus* 'rumour' from '*kuuldud* 'heard').

*-e* : *-me* derives nouns expressing a means ('*kaitse* 'protection' from '*kaitsema* 'to defend, to protect', '*side* 'bond; bandage' from '*siduma* 'to tie') or a product ('*märge* '(written) note' from '*märkima* 'to note').

*-is* : *-ise* derives nouns expressing a product of an action ('*kirjutis* 'writing' from '*kirju*'*tama* 'to write', '*ehitis* 'building' from '*ehi*'*tama* 'to build').

*-m* : *-mi* derives nouns expressing an object ('*kandam* 'burden' from '*kandma* 'to carry'), product ('*sulam* 'alloy' from '*sulama* 'to melt (vi)'), or a means of an action or process ('*ravim* 'remedy' from '*ravima* 'to treat, to cure').

## PARTICIPANT NOUNS

*-ja* derives general agent or experiencer nouns: '*sööja* 'eater' from '*sööma* 'to eat', '*olija* 'one who is' from '*olema* 'to be', '*kirju*'*taja* 'writer' from '*kirju*'*tama* 'to write', '*õpe*'*taja* 'teacher' from '*õpe*'*tama* 'to teach', '*laulja* 'singer' from '*laulma* 'to sing', '*kanna*'*taja* 'sufferer' from '*kanna*'*tama* 'to suffer'. Sometimes such a derivative may denote also a professional ('*kirju*'*taja* 'clerk', '*õpe*'*taja*) or an instrument that fulfils a certain operation ('*imeja* from '*imema* 'to suck' in '*tolmu*'*imeja* 'vacuum cleaner', lit. 'dust sucker', '*pommi*'*taja* 'bomber' from '*pommi*'*tama* 'to bomb'). Several grammars have presented such derivatives as *nomina agentis* together with verb forms.

*-nu* derives agent or experiencer nouns from active past participles in *-nud*: '*söönu* 'one who has eaten', '*olnu* 'sth that has taken place', '*kirju*'*tanu*

'one who has written', *'kanna'tanu* 'victim', cf. the corresponding participles *söönud* 'eaten', *olnud* 'been', *'kirju'tanud* 'written' and *'kanna'tanud* 'suffered'

*-du/-tu* derives patient nouns from impersonal participles in *-dud* and *-tud* of transitive verbs: *söödu* 'what was eaten', *'kirju'tatu* 'what was written', cf. the corresponding participles *söödud* and *'kirju'tatud*.

*-ik*: *-iku* derives nouns that characterize a person by his main action (*'imik* 'suckling' from *imema* 'to suck', *põgenik* 'refugee' from *põge'nema* 'to escape'), a means of an action (*'õpik* 'course book' from *õppima* 'to study'). *-ik*: *-iku* may derive nouns from present participles (*'minevik* 'past' from *minev* 'going', *olevik* 'present' from *olev* 'existing', *'tulevik* 'future' from *tulev* 'coming') and supines (*'lugemik* 'reader' from *'lugema* 'to read', *vestmik* 'phrase book' from *vestma* 'talk, converse').

*-ur* *-uri* derives nouns that denote either a person with a characteristic action (*'sõdur* 'warrior, soldier' from *sõdima* 'to fight (in a war)', *'lendur* 'pilot' from *lendama* 'to fly', *rändur* 'traveller' from *rändama* 'to travel'), a technical device according to its main function (*'kallur* 'tipper truck' from *'kallama* 'pour', *pidur* 'brake' from *pidama* 'hold; stop, detain'), some animals and insects (*'ujur* 'diving beetle' from *'ujuma* 'to swim').

## ACTION PLACE NOUNS

*-la* derives nouns expressing a place for a certain action: *ujula* 'swimming pool' from *ujuma* 'to swim', *magala* 'sleeping quarters' from *magama* 'to sleep', *võimla* 'gym room' from *'võimlema* 'to do gymnastics'

## CARITIVE DEVERBAL ADJECTIVES

*-matu* derives caritive adjectives from stems (a) of the personal mood indicating that the person, object, or phenomenon denoted by the head noun has not undergone a process or state (*'oota matu* 'unexpected' from *ootama* 'to wait', *võitmatu* 'invincible' from *võitma* 'to win', *ette nägematu* 'unforeseen' from *ette nägema* 'to foresee', *ole matu* 'non-existent' from *olema* 'to be, to exist') or will not perform an action or undergo a process or state (*'kannata matu* 'impatient' from *'kanna'tama* 'to suffer', *püsi'matu* 'restless, impatient' from *püsima* 'to stay', *sure matu* 'immortal' from *surema* 'to die', *võimatu* 'impossible' from *võima* 'can; to be able', *'usku matu* 'unbelievable, incredible' from *'uskuma* 'to believe'); or (b) of the impersonal mood, usually in order to indicate impossibility of a process (*'kujut'leta matu*

'unimaginable', *nähta matu* 'invisible', *usuta matu* 'unbelievable, implausible', cf. the corresponding impersonal present participles *kujut letav* 'imaginable, that can be imagined', *nähtav* 'visible', *usutav* 'believable, plausible').

### 4.1.3. Derivation of nominals from nominals and particles

#### DERIVATION OF NOUNS

*-ik* : *-iku* derives a wide range of nouns from different parts of speech, expressing persons (*'isik* 'person' from *'ise* 'self'; *'habemik* 'bearded man' from *'habe* 'beard', GSg *'habeme*; *'kaksikud* 'twins (NPI)' from *'kaks* 'two'; *'saadik* 'ambassador' from *'saatma* 'to send', 3Sg *'saadab*), animals and plants (*'ristik* 'clover' from *'rist* 'cross'), objects (*'häälik* 'sound' from *'hääl* 'voice', *'sõrmik* 'glove' from *'sõrm* 'finger', *'külmik* 'refrigerator' from *'külm* 'cold'), places (*'rannik* 'coast' from *'rand* 'shore, beach'; *'kuusik* 'spruce forest' from *'kuusk* 'spruce', GSg *'kuuse*).

*-kas* : *-ka* derives nouns expressing a person according to his origin (*'narnakas* 'inhabitant of Narva', *'poolakas* 'Pole' from *'Poola* 'Poland') or somewhat pejoratively according to his characteristic features (*'kaltsakas* 'ragamuffin' from *'kalts* 'rag', *'kүүrakas* 'hunchback' from *'kүүr* 'hunch, hump'), an animal or plant, mostly from unique stems (*'vasikas* 'calf', *'kutsikas* 'puppy', *'harakas* 'magpie', *'liblikas* 'butterfly', *'mustikas* 'blueberry' from *'must* 'black', *'purjekas* 'sailboat' from *'puri* 'sail', GSg *'purje*).

*-ke(ne)* : *-kese* derives diminutives, also from proper names, mostly hypocoristically (*'pojake* 'sonny' from *'poeg* 'son', GSg *'poja*; *'linnuke* 'birdie' from *'lind* 'bird', GSg *'linnu*; *'majake* 'little house' from *'maja* 'house'), sometimes pejoratively (*'daamike* from *'daam* 'lady').

*-la* derives nouns expressing a place for a certain action: *'söökla* 'public eating place' from *'sөөk* 'food', *'kanala* 'henhouse' from *'kana* 'hen', *'tagala* 'rear' from *'taga* 'behind'

*-lane* *-lase* derives nouns expressing (a) a person according to his origin (*'eestlane* 'Estonian' from *'Eesti* 'Estonia'; *'mustlane* 'Gypsy' from *'must* 'black'; *'venelane* 'Russian', cf. *'Vene maa* 'Russia'; *'saarlane* 'islander' from *'saar* 'island'), group (*'kristlane* 'Christian', *'kato liiklane* 'Catholic'), field of activity or some other properties (*'õpi lane* 'student; disciple' from *'õppima* 'to study', *'liitlane* 'ally' from *'liit* 'union', *'vaenlane* 'enemy' from *'vaen* 'enmity') and (b) an animal, bird or insect (*'uni lane* 'dormouse' from *'uni* 'sleep', *'mesi lane* 'bee' from *'mesi* 'honey').

*-line* : *-lise* derives nouns expressing a person according to his position (*'üüri line* 'lodger; tenant' from *'üür* 'hire, rent', *'tööline* 'worker' from *'töö*

'work') or participation in an event ('*kiriku* 'line 'churchgoer' from '*kirik* 'church').

*-nik* *-niku* derives nouns expressing a person according to his field of activity ('*kohtunik* 'judge' from '*kohus* 'court', GSg '*kohtu*'; '*talunik* 'farmer' from '*tal* 'farm') or some other features ('*võlgnik* 'debtor' from '*võlg* 'debt'); the suffix has been used also to derive names of several chemical elements ('*hapnik* 'oxygen' from '*hapu* 'sour', '*süsinik* 'carbon' from '*süsi* 'coal').

*-nna* and *-tar* derive nouns emphasizing that a person is female ('*sakslanna* 'female German' from '*sakslane* 'German', '*kangelanna* 'heroine' from '*kange* 'lane 'hero', '*õpetajanna* 'female teacher' from '*õpe* 'taja 'teacher', '*juuditari* 'Jewess' from '*juut* 'Jew'). In certain contexts the two types of derivatives may reflect a hierarchy, cf. '*kunin* 'ganna 'queen' and '*kunin* 'gatar 'king's or queen's daughter', both from '*kuningas* 'king'.

*-stik* *-stiku* derives nouns expressing a set or collection or a place with such an collection: '*laevastik* 'fleet, navy' from '*laev* 'ship', '*sõnastik* 'vocabulary; dictionary' from '*sõna* 'word', '*saarestik* 'archipelago' from '*saar* 'island'.

*-ur* : *-uri* derives nouns that denote either a person with a characteristic property ('*ihnur* 'miser' from '*ihne* 'stingy') or with a characteristic occupation ('*kalur* 'fisherman' from '*kala* 'fish', '*kujur* 'sculptor' from '*kuju* 'figure; statue', '*pankur* 'banker' from '*pank* 'bank') or some animals and insects ('*tuhkur* 'polecat' from '*tuhk* 'ashes').

*-us* : *-use* (after a disyllabic stem of Q1 or Q2 *-dus* *-duse*; sometimes *-sus* : *-suse*) derives nouns that express a property from adjectives ('*tarkus* 'wisdom' from '*tark* 'wise'; '*pikkus* 'length' from '*pikk* 'long'; '*ainsus* 'the singular' from '*ainus* 'single', GSg '*ainsa*'; '*mitmus* 'the plural' from '*mitu* 'several', GSg '*mitme*'; '*õigus* 'right; law' and '*õigsus* 'accuracy') and abstract nouns from numerals ('*üksus* 'unit' from '*üks* 'one').

## DERIVATION OF ADJECTIVES

The suffix *-ik* has been used to derive some adjectives: '*poolik* 'incomplete, unfinished; half full; half-empty' from '*pool* 'half', '*metsik* 'wild' from '*mets* 'forest, woods', '*lapsik* 'childish' from '*laps* 'child'.

*-jas* *-ja* derives adjectives expressing a similarity ('*nooljas* 'arrowy' from '*nool* 'arrow'), or a reduced grade of a quality ('*mustjas* 'blackish' from '*must* 'black', '*valkjas* 'whitish' from '*valge* 'white').

*-kas* : *-ka* derives adjectives expressing an excess of an organ, virtue, or property ('*rinnakas* 'busty, bosomy' from '*rind* 'breast; bosom'; '*eakas* 'elderly' from '*iga* 'age', GSg '*ea*'; '*kulukas* 'expensive' from '*kulu* 'expense';

*menukas* 'successful' from *menu* 'success') or a reduced grade of a quality ('*rohekas* 'greenish' from *rohe* 'line 'green', *punakas* 'reddish' from *punane* 'red').

*-lik* : *-liku* derives adjectives expressing (a) similarity to someone or something ('*inimlik* 'human' from '*ini*' *mene* 'person, human being', '*lapselik* 'child-like' from '*laps* 'child', *a meerika* 'lik' 'American-like' from *A meerika* 'America', '*lõplik* 'final' from *lõpp* 'end'), (b) presence of something ('*auklik* 'full of holes' from *auk* 'hole', '*kahjulik* 'harmful' from '*kahju* 'harm', '*kasulik* 'useful' from '*kasu* 'use', '*õnnelik* 'happy' from '*õnn* 'happiness') or (c) belonging to a certain field ('*kiriklik* 'clerical' from '*kirik* 'church', '*kirjandus* 'lik' 'literary' from '*kirjandus* 'literature', '*teaduslik* 'scientific' from '*teadus* 'science', '*ühis* 'kondlik' 'social' from '*ühis* 'kond' 'society').

*-line* : *-lise* derives adjectives expressing presence of a quality, feature, or an effect ('*värvi* 'line 'coloured' from *värv* 'color'; '*maksu* 'line 'fee-paying, not free' from '*maks* 'fee, charge', GSg *maksu*); belonging to a certain field ('*suuline* 'oral' from '*suu* 'mouth'; '*aja* 'line 'temporal; chronological' from '*aeg* 'time', GSg *aja*; '*sõja* 'line 'military' from '*sõda* 'war', GSg *sõja*; '*eri* 'line 'special' from '*eri* 'different'), a quantity ('*sekundi* 'line 'of a second' from *sekund* 'second', '*kuuline* 'monthly' from '*kuu* 'month').

*-ne* : *-se* derives adjectives expressing the material ('*puine* 'woody' from *puu* 'tree', PPl *puid*; '*kuldne* 'golden' from *kuld* 'gold'; '*villane* 'woollen' from *vill* 'wool', GSg *villa*), something that has covered, entered or influenced the object, event or phenomenon ('*tolmune* 'dusty' from *tolm* 'dust', GSg *tolmu*; '*soolane* 'salty' from *sool* 'salt', GSg *soola*; '*lumine* 'snowy' from '*lumi* 'snow'; '*vihmane* 'rainy' from '*vihm* 'rain', GSg *vihma*), a position ('*keskne* 'central' from '*kesk* 'centre'; '*äärne* 'marginal' from '*äär* 'margin', '*siinne* 'of this place' from '*siin* 'here', '*sealne* 'of that place' from '*seal* 'there'), time ('*tänane* 'today's' from '*täna* 'today', '*homne* 'tomorrow's' from '*homme* 'tomorrow', '*hommi* 'kune' 'of the morning' from '*hommik* 'morning').

*-tu* derives caritive adjectives from nouns: '*hooletu* 'careless' from *hool* 'care', '*kodutu* 'homeless' from '*kodu* 'home'

## DERIVATION OF ORDINAL AND FRACTIONAL NUMERALS

Except for the first and second ordinal number in every ten (cf. *esi* 'mene' 'first' and '*teine* 'second'), all the other ordinal numerals are derived by means of the suffix *-s* in the nominative case singular and *-nda* in all the other case forms; the same is true for the numerals 11<sup>th</sup> and 12<sup>th</sup>, cf. '*ühe* 'teist' 'kümmes' 'eleventh', GSg '*ühe* 'teist' 'kümnenda'. In all fractionals the denominator is derived from ordinals by means of the suffix *-ndik* : *-ndiku*, cf. '*kolmandik* 'a

third' from *'kolmas* 'the third', *'kümnendik* 'a tenth' from *'kümnes* 'the tenth' Cf. 3.4.

## DERIVATION OF ADVERBS

*-kesi* derives mostly adverbs expressing a set (*'kahe'kesi* 'two together, in twos' from *kaks* 'two', GSg *'kahe*; *seitsme'kesi* 'as a group of seven' from *seitse* 'seven', GSg *seitsme*; *mitme'kesi* 'several together' from *mitu* 'several', GSg *mitme*), rarely a manner (*'tasa'kesi* 'quietly; slowly' from *tasa* 'quietly; slowly').

*-kile* : *-kil* : *-kilt* derives verbs expressing entering, being in and, more rarely, leaving a position or situation, cf. the endings of exterior cases: allative, adessive and ablative: *'istu'kile* 'into a sitting position', *'istikil* 'in a sitting position', *'istikilt* 'from a sitting position' from *'istuma* 'to sit'

*-kuti* derives adverbs that express the position to each other: *'koha'kuti* 'on the same line' from *'koht* 'place', GSg *'koha*; *vasta'kuti* 'facing each other' from *vastas* 'opposite to'; *rinna'kuti* 'abreast' from *rind* 'breast', GSg *rinna*.

*-li* derives adverbs that express a position or situation: *'istuli* 'into a sitting position, in a sitting position' from *istuma* 'to sit'; *näoli* 'on one's face' from *nägu* 'face', GSg *näo*.

*-lt* derives adverbs from adjectives and participles: *kiirelt* 'quickly' from *'kiire* 'quick', *mugavalt* 'comfortably' from *mugav* 'comfortable', *näiliselt* 'seemingly' from *näiline* 'seeming', *nähtavalt* 'visibly' from *nähtav* 'visible', *elavalt* 'vividly' from *elav* 'living', *jäädavalt* 'permanently' from *jäädav* 'permanent'

*-misi* derives adverbs that express the manner of action: *aega'misi* 'slowly, little by little' from *aeg* 'time', *'koba misi* 'gropingly' from *'kobama* 'to grope', or the position to each other: *vasta misi* 'facing each other' from *vastas* 'opposite to'

*-sti* derives adverbs, often synonymous with *lt*-derivatives, from adjectives and impersonal present participles: *'kiiresti* 'quickly' from *'kiire* 'quick', *muga'vasti* 'comfortably' from *mugav* 'comfortable', *nähta'vasti* 'apparently' from *nähtav* 'visible'

*-stikku* derives adverbs that express position to each other: *'kohas'tikku* 'facing each other' from *'koht* 'place', GSg *'koha*; *pealis'tikku* 'on top of each other' from *peal* 'on, on top'; *vastas'tikku* 'facing each other; mutually' from *vastas* 'opposite (to)'

*-ti* derives adverbs expressing manner (*'samuti* 'in the same way; also' from *sama* 'same', *vääriti* 'wrongly' from *väär* 'wrong'), distribution (*'ka-*

*heti* 'in two ways' from *kaks* 'two', GSg *kahe*; *mitmeti* 'in several ways' from *mitu* 'several', GSg *mitme*; *õhtuti* 'in the evenings' from *õhtu* 'evening'; *suviti* 'in summers' from *suvi* 'summer'; *alati* 'always' from *ala* 'area, sphere, subject'; *isi'kuti* 'depending on the person' from *isik* 'person').

*-tsi* derives adverbs expressing the way of moving or connection (*maitsi* 'by land' from *maa* 'land', *meritsi* 'by sea' from *meri* 'sea', *tele'fonitsi* 'by phone' from *telefon* 'phone'), the manner of action (*käsitsi* 'by hand' from *käsi* 'hand'), the position to each other (*näotsi* 'face to face' from *nägu* 'face', GSg *näo*; *rinnutsi* 'abreast' from *rind* 'breast', GSg *rinna*). *-tsi* often follows a plural stem, cf. *maitsi* and *rinnutsi*.

## 4.2. Compounding

Compounding is a process that results in creating from at least two words or stems a lexical unit that syntactically functions as a whole. The resulting lexical unit may have a specific structure different from phrase structures and may have a meaning that is different from the meaning of a similar sequence of words in a phrase that contains no compounds.

Compounds are either (1) coordinate (all members are equal even when ordered), cf. *must* = 'valge' 'black and white' and (2) subordinate (consist of one or more modifiers, usually as a periphery preceding the nucleus (*kooli-laps* 'schoolchild', rarely following the nucleus, cf. *Jeesus-laps* 'Jesus, the child'). The structure of compounds is reflected also in their pronunciation, cf. 2.1.6.

The components of a compound are written together, except for the numerals, the spelling of which is governed by special rules, cf. also 3.4.

Compounding includes formation of compound verbs, compound nominals (compound nouns, compound adjectives, compound pronouns), and compound adverbs.

Many compounds are lexicalized. There exist two-component compounds, where the meaning of the first component has been forgotten, cf. *juga-puu* 'yew', *türn-puu* 'buckthorn' (with *puu* 'tree') as well as an open set of compounds expressing a set, the meaning of the final component *kond* (GSg *konna*) of which is unknown, cf. *inim-kond* 'mankind', *mees-kond* 'male team', *nais-kond* 'female team', *sugu-kond* 'sib' (*sugu* 'gender'); for the sake of simplicity in grammars of Estonian *kond* is presented as a derivational suffix although neither the vowel *o* nor the quality gradation (cf. *nd nn*) occurs outside the stem-initial syllable.

Below only compound and complex verbs and compound nouns and adjectives are dealt with, for compound numerals and pronouns see 3.4 and 3.5.

#### 4.2.1. Compound verbs and phrasal verbs

Several verbs, viz. verb paradigms, occur in different kinds of combinations with other parts of speech, notably with adverbs and nouns that have no other function in a phrase than to modify the meaning of the verb.

Combinations that throughout the verb paradigm end in verb forms, tensely following the modifier ('*ala*–'*hindama* 'to underestimate', Inf '*ala*–'*hinnata*, 3Sg *ala*–'*hindab*, PsPastPle *ala*–'*hinnanud*) are called COMPOUND VERBS. Modifiers in compound stems often are bound root morphemes ('*ala*– 'under', '*üle*– 'over'), adverbs or adverb stems ('*eel*– 'for-', '*järel* 'after', '*rist*– 'cross-', '*vastu*– 'counter', '*taas*– 'again; re-'), in recent compound verbs also some adjectives. Combinations with varying order of components and often with a phrasal meaning alongside or instead of the literal meaning are called here PHRASAL VERBS, and are treated in Estonian grammars as two different classes, referred to as *ühendtegu sõnad* 'composite verbs' and *väljendtegu sõnad* 'expression verbs'. Composite verbs are known also as PARTICLE VERBS. Usually participles of two-component compound verbs in the role of the attribute have the structure of a compound with the weakening juncture (cf. 2.1.6) although may occur also as two separate words. Composite verbs are the most numerous and important verb class after simple verbs.

Composite verbs consist of an auxiliary adverb and a verb ('*ette* '*hoiatama* 'to forewarn', lit. 'to warn ahead', Inf '*ette* '*hoiatada*, 3Sg '*hoiatab ette*; '*ette* '*maksma* 'to prepay'; '*ette* '*nägema* 'to foresee'; '*ette* '*vaatama* 'to look ahead'; '*läbi* '*nägema* 'to see through', '*läbi* '*vaatama* 'to look through'). In some cases a combination of an adverb and verb may behave both as a compound verb and as a composite verb as the verb for 'to overestimate', cf. '*üle*–'*hindama*, 3Sg '*üle*–'*hindab* and '*üle* '*hindama*, 3Sg '*hindab üle*.

Phrasal verbs of the second class, i.e. the expression verbs, consist of a noun, adjective or pronoun form and a verb ('*kätte võtma* 'to put in hand; to undertake', lit. 'to take in (Ill) hand', Inf '*kätte* '*võtta*, 3Sg '*võtab kätte*; '*pahaks panema* 'to disapprove', lit. 'to put as bad (Trl)', Inf '*pahaks* '*panna*, 3Sg '*pane**b* '*pahaks*). The latest grammars include even longer phrases to complex verbs of the second class, e.g. '*ühist keelt leidma* 'to find a common language', '*ajast ja arust olema* 'to be obsolete', lit. 'to be out of time and mind'.

### 4.2.2. Compound nouns

Compound nouns include sequences NOUN + NOUN, ADJECTIVE + NOUN, VERB + NOUN, ADVERB + NOUN.

#### NOUN + NOUN

Compounds of the structure noun + noun, include co-ordinate compounds and subordinate compounds.

Co-ordinate compounds consist of component words that indicate components of a whole. Co-ordinate compounds reveal varying stress patterns (*õõ+`päev ~ `õõ- päev* 'twenty four hours', lit. 'nightday'; *köök+`tuba* 'living room with a kitchenette', lit. 'kitchenroom'; *kuu-`päev* 'date', lit. 'month-day'). Their first component is always in nominative.

Subordinate compounds contain a modifier, mostly in nominative, genitive or in the form of the shortened genitive stem, more rarely in illative, inessive, elative, allative, adessive, ablative, translative, abessive or genitive plural. The occurrence of the modifier in nominative or genitive is often unpredictable.

Characteristically, the modifier noun is in the genitive if it expresses

- (a) the possessor, producer or the means of producing of something:

<i>riigi mets</i> 'a/the forest of the state'	>	<i>riigi-`mets</i> 'state forest'
(state&G forest&N)		(state&G-forest&N)
<i>selle `lamba `liha</i> 'meat of this sheep'	>	(`see) <i>`lamba-`liha</i> '(this) mutton'
(this&G sheep&G meat&N)		((this&N) sheep&G-meat&N)
<i>'kassi poeg</i> 'cat's offspring'	>	<i>'kassi-`poeg</i> 'kitten'
(cat&G son&N)		(cat&G-son&N)
<i>'kuuli `teki`tatud `haav</i> 'wound caused by a bullet'	>	<i>'kuuli-`haav</i>
(bullet&G cause.Ips.PastPle wound&N)		(bullet&G-wound&N)
<i>`masinaga `tehtav `töö</i> 'work made by means of a machine'	>	<i>`masina-`töö</i>
		'machinework'
(machine&Com do.Ips.PrPle&N work&N)		(machine&G-work&N);

- (b) a total whose constituent part is a person, thing or event:

<i>`seene `kübar</i> 'cap of a/the mushroom'	>	<i>`seene-`kübar</i> 'mushroom cap'
(mushroom&G cap&N)		(mushroom&G-cap&N);

- (c) the object of an action:

<i>juht `juhib `riiki</i> 'the leader leads a state'	>	<i>`juht on riigi-`juht</i> 'the leader is the state leader'
(leader&N lead.3Sg state&P)		(leader&N is state&G-'leader&N);

## (d) the purpose of something or someone:

*raamatud on 'laste jaoks* 'the books are for children' > *'laste+ raamatud*  
 'children's books'  
 (book.Pl&N be.3 child.Pl&G for) (child.Pl&G+book.Pl&N);

(e) the origin or the characteristic environment of something or somebody (still there exists a huge number of biological and agricultural terms created in the 20<sup>th</sup> century that contradict the natural tendency):

*rannal elav rahvas* 'population living on a coast' > *ranna- rahvas*  
 'coastal people'  
 (coast.Ade live.PrPl&N folk&N) (coast&G-folk&N)  
*'metsas kasvav puu* 'a tree growing in forest' > *metsa- puu* 'forest tree'  
 (forest.Ine grow.PrPl&N tree&N) (forest&G-tree&N);

## (f) the time domain of an event:

*päeva jaoksul tehtav töö* 'the work to be done during a day' > *päeva- töö*  
 'day's work'  
 (day&G course.Ade do.IpsPrPl&N work&N) (day&G-work&N)  
*'nädalas makstav palk* 'wages paid per week' > *nädala- palk* 'weekly wages'  
 (week.Ine pay.Ips.PrPl&N wage&N) (week&G-wage&N);

## (g) the characteristic resource:

*'järves on vähki* 'there is some crayfish in the lake' > *'vähi- järv* 'crayfish lake'  
 (lake.Ine be&3Sg crayfish&P) (crayfish&G-lake&N).

A modifier is mostly in the nominative if it expresses (a) the material of which the object expressed by the nucleus is composed or made ('*kuld+ kell* 'gold watch', *puu+ maja* 'wooden house', lit. 'tree, wood+house'; *plekk+ katus* 'plate roof'), with exceptions ('*roo- katus* 'thatched roof', lit. 'reed roof'); (b) the characteristic shape of an object ('*ketas+ saag* 'circular saw', lit. 'discus+saw', *tiib+ klaver* 'grand piano', lit. 'wing+piano'; (c) a sub-type of the phenomenon expressed by the main component:

*'kasvaja on vähk* 'the tumor is cancer' > *'vähk+ kasvaja* 'cancer'  
 (grower&N be&3Sg crayfish&N) (crayfish&N+grower&N).

There exist many potentially open series of compounds, cf. *'päikese- valgus* 'sun light', *'kuu- valgus* 'moon light', *'tähe- valgus* 'star light', *'küünla- valgus* 'candle light', *e'lektri- valgus* 'electric light'; *'linna- mees* 'townsman', *'maa- mees* 'countryman; landsman', *'mere- mees* 'seaman', *'ranna- mees* 'man from the coast', *'laeva- mees* 'shipman, sailor', *'talu- mees* 'man from a farm', *'pere- mees* 'master (cf. *pere* 'family'), *'abi- elu+ mees* 'married man, husband' (cf. *'abi- elu* 'marriage'), *'naise- mees* 'married man'

(cf. *naine* 'woman; wife', GSg *naise*), *töö-me*s 'workman', *spordi-me*s 'sportsman', *sõja-me*s 'warrior' (cf. *sõda* 'war', GSg *sõja*), *nalja-me*s 'funster' (cf. *nali* 'fun', GSg *nalja*), *rahva-me*s 'man of the people' (cf. *rahvas* 'people', GSg *rahva*); *riigi-me*s 'statesman' (cf. *riik* 'state', GSg *riigi*); *manala-me*s 'deadman' (cf. *manala* 'netherworld').

## ADJECTIVE + NOUN

In compounds with an adjective as modifier, the adjective is either in the nominative singular (*suur-saadik* 'ambassador', lit. 'great-envoy', *vana-ema* 'grandmother', lit. 'old mother') or occurs as a shortened stem. Adjectives ending in *-ine* : *-ise*, *-ane* : *-ase* after a long initial syllable and *-une* : *-use* (e. g. *'hiline* 'former', GSg *'hilise*; *esmane* first; primary'; *alune* 'situated under something', GSg *aluse*) take usually a shortened stem ending in *s* (*'hilis-sügis* 'late fall'; *esmas-päev* 'Monday', lit. 'first day'; *alus-pesu* 'underwear'); elsewhere the suffix *-ne* *-se* and suffixes *-ke(ne)* : *-kese*, *-line* : *-lise* and *-mine* : *-mise* (e.g. *algne* 'primary; original', *punane* 'red', *'lühike* 'short', *tava'line* 'ordinary', *sise mine* 'inner; internal') are dropped (*alg+ andmed* 'primary data'; *puna-nina* 'red nosed person', lit. 'rednose'; *'tava-kodanik* 'ordinary citizen'; *sise-haigus* 'internal disease').

## VERB + NOUN

Verbs in the role of modifiers take the form of the personal present participle (*'põlev-kivi* 'oil shale', lit. 'burning stone'); agent noun (*'asu'taja-liige* 'founding member'); shortened form of the action noun (*'magamis-tuba* 'bedroom', lit. 'sleeping room'; *'kirjutus-laud* 'writing table') or a short stem form (*'küsi-lause* 'interrogative sentence'; *tõmb-soon* 'vein', lit. 'pull vessel').

## ADVERB + NOUN

Particles as modifiers usually occur in an unchanged form (*'all-kiri* 'signature', lit. 'under&locative-script'; *peal-kiri* 'heading', lit. 'above.Ade-script'; *ees-sõna* 'preface', lit. 'fore.Ine-word'; *'järel-sõna* 'epilogue', lit. 'after.Ade-word'; *ees-külg* 'front side'; *taga-külg* 'rear side'; *'vastas-külg* 'opposite side'; *'koos-kõla* 'accord', lit. 'together.Ine-sound'). Some particles as modifiers occur in a shortened form; e.g. *'kaldu* 'sloping' > *kald-*,

*püsti* 'erect' > *püst-*, *põiki* 'aslant' > *põik-*, *lahku* 'apart; separately' > *lahk-* (*kald-joon* 'sloping line', *püst-joon* 'vertical line', *põik-puu* 'crossbeam', *lahk-arvamus* 'disagreement').

#### 4.2.3. Compound adjectives

Compound adjectives include sequences adjective + adjective, noun + adjective, numeral + adjective and particle + adjective. Sequences of the latter type are few and lexicalized.

#### ADJECTIVE + ADJECTIVE

Most adjectives of the type adjective + adjective are derived from attributive phrases and have the modifier in the genitive case or a shortened stem form. The underlying attributive phrases are of the types (a) adjective + noun in comitative (*pika näoga* 'with a long face' > *pika-näoline* 'longfaced', *siniste silmadega* 'with blue eyes' > *sini-silmne* 'blue-eyed'), (b) adjective + noun in genitive (*nüüdse aja* 'of the present time' > *nüüdis-aegne* 'modern') or (c) adjective + noun in partitive (*puhast tõugu* 'of pure breed' > *puhta-tõuline* 'pure-bred').

In some cases an adjective is modified by another adjective; mostly in nominative (*magus-hapu* 'sour-sweet', *täis-villane* '100 per cent wool'; cf. *täis* 'full' and *villane* 'woollen'); or represented by a shortened stem (*sini-lilla* 'blue-violet', *pisi-tilluke* 'tiny'; cf. *sinine* 'blue' and *pisike* 'little'); or the genitive case form (*sinise-kirju* 'blue-coloured', cf. *sinine* 'blue' and *kirju* 'variegated').

#### NOUN + ADJECTIVE AND PRONOUN + ADJECTIVE

Many adjectives of the type contain a noun or a pronoun in the form of the genitive case or a shortened stem and are derived either from attributive phrases of the type (a) noun/pronoun in genitive + noun in genitive (*sõja aja* 'of wartime' > *sõja-aegne* 'wartime (adj)', *meie aja* 'of our time' > *meie-aegne* 'ourtime (adj)'), (b) noun in genitive + adjective (*meetri pikkune* 'of the length of one meter' > *meetri-pikkune* 'one-metre long'), (c) adjective + noun in elative (*vaene kalast* 'poor from fish' > *kala-vaene* 'fish-poor', *vaba rasvast* 'free from fat' > *rasva-vaba* 'fatless'), (d) noun + noun in comitative (*kella kujuga* 'of the shape of a bell' > *kella-kujuline* 'bell

shaped'), (e) adjective + noun in comitative ('*kindla värviga* > *värvi-kindel* 'colourproof') or adjective + noun in genitive + the postposition *poolt* 'for', *jaoks* 'for (the sake of)' or *vastu* 'against' ('*kindel töö jaoks* 'firm for the sake of work' > *töö-kindel* 'reliable', '*kindel lollide vastu* 'firm against fools' > '*lollo-kindel* 'foolproof', '*sõbralik kasu taja vastu* 'friendly to a user' > '*kasu taja-sõbralik* 'user-friendly').

A modifier is in the nominative case if it expresses an extreme degree of a property via a comparison ('*mesi+ magus* 'sweet as honey', lit. 'honey sweet'; '*surm+ kindel* 'as sure as death', lit. 'death sure'; '*tuli+ soolane* 'extremely salty', lit. 'fire salty'). The case of modifiers expressing a color shade varies with the noun ('*taevas+ sinine* 'sky (NSg) blue'; '*kohvi-pruun* 'coffee (GSg) brown').

## NUMERAL + ADJECTIVE

A numeral as a modifier is in genitive: '*kahe-kordne* 'twofold; double', '*kolme-korruseline* 'three-storeyed', '*seitsme-aastane* 'seven years old'

The occurrence of a nominal in the nominative in an adjective that contains several stems is an indication that a compound of the type numeral + noun has been adjectivized, e.g. '*üks-meelne* 'unanimous' from '*üks-meel* 'unanimity', lit. 'one mind'; '*kolm-nurkne* 'triangular' from '*kolm-nurk* 'triangle'

### 4.2.4. Compound adverbs and prepositions

All compound adverbs and prepositions are wholly lexicalized. Most compound adverbs have the structure nominal + noun ('*käsi-käes* 'hand-in-hand'; '*üks-kord* 'once', lit. 'one time'); preposition + noun ('*alla-mäge* 'down-hill', '*üles-voolu* 'upstream'). Compound adverbs of the structure nominal + adverb ('*kõige-pealt* 'first of all', lit. 'all&G-above.Abl'; '*muu-seas* 'by the way', lit. 'else&G-among.Ine') or adverb + adverb ('*üle-homme* 'the day after tomorrow', lit. 'over-tomorrow', '*otse-kohe* 'at once, immediately', lit. 'directly+at once') are rare. Still there is a group of identical compound adverbs and prepositions with the structure adverb + adverb ('*siia-poole*, '*siin-pool* 'in this direction, over here', '*siit-poolt* 'from this direction', '*sinna-poole*, '*seal-pool* 'in that direction, over there', '*sealt-poolt* 'from that direction'), and one compound whose both components occur as adverbs and prepositions, cf. '*ühes-koos* 'all together (adverb); together with (preposition)', lit. 'together-together'

## Abbreviations

**Abe** – abessive, **Abl** – ablative, **Ade** – adessive, **All** – allative, **Com** – comitative, **Ela** – elative, **Ess** – essive, **G** – genitive, **Ill** – illative, **Ine** – inessive, **N** – nominative, **P** – partitive, **Pl** – plural, **Sg** – singular, **Ter** – terminative, **Trl** – translative

**1Pl** – 1<sup>st</sup> person plural, **1Sg** – 1<sup>st</sup> person singular, **2Pl** – 2<sup>nd</sup> person plural, **2Sg** – 2<sup>nd</sup> person singular, **3Pl** – 3<sup>rd</sup> person plural, **3Sg** – 3<sup>rd</sup> person singular, **Act** – active, **Aff** – affirmative, **Cnd** – conditional mood, **Ger** – gerund, **Imp** – imperative mood, **Ind** – indicative mood, **Inf** – infinitive, **Ipf** – imperfect tense, **Ips** – impersonal voice, **iv** – intransitive verb, **Jus** – jussive mood, **Neg** – negative, **Pf** – perfect tense, **Pr** – present tense, **Ps** – personal voice, **Pss** – passive voice, **Ple** – participle, **Quo** – quotative mood, **Sup** – supine, **tv** – transitive verb

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# SYNTAX\*

Mati Ereht

## 5.1. Basic clause patterns

There are two basic syntactic patterns of clauses in Estonian: normal (or non-inverted) and inverted types of clauses. Both of them can be subdivided into several sub-patterns, cf. Table 1.

**Table 1.** Basic clause patterns in Estonian

Normal (non-inverted) clauses		Inverted clauses	
	a. intransitive clauses		
SV	<i>Jaan jookseb</i> 'Jaan is running'	ObIVS	<i>Jaanil</i> [Ade] <i>on vend</i> 'Jaan has a brother'
SVObl	<i>Kõik oleneb meist</i> [Ela] 'Everything depends on us'		<i>Jaanil</i> [Ade] <i>on/hakkas hirm</i> 'Jaan is/became afraid'
SVP	<i>Jaan on insener/haige</i> 'Jaan is an engineer/ill'		<i>Jaanile</i> [All] <i>meeldivad</i> <i>lapsed</i> 'Jaan likes children'
	<i>Jaan töötab insenerina/haigena</i> [Ess] 'Jaan works as an engineer / while being ill'	AVS	<i>Aias</i> [Ine] <i>on/kasvavad lilled</i> 'In the garden there are/grow flowers'
	<i>Jaan sai inseneriks / jäi haigeks</i> [Trl] 'Jaan became an engineer / fell ill'	(A)VS	<i>(Praegu) on hommik</i> '(Now) it is morning'
SVA	<i>Jaan on/viibib toas</i> [Ine] 'Jaan is inside'	ObIVP	<i>Jaanil</i> [Ade] <i>on/hakkas piinlik</i> 'Jaan feels / started to feel embarrassed'
	b. transitive clauses	(A)VP	<i>(Väljas) on külm / läks külmaks</i> [Trl] 'Outside it is cold / became cold'
SVO	<i>Jaan sööb suppi</i> [P] 'Jaan is eating soup'	(A)V	<i>(Väljas) müristab</i> 'It is thundering outside'
SVOblO	<i>Jaan rääkis sellest</i> [Ela] <i>midagi</i> [P] 'Jaan said something about it'		
	<i>Jaan andis mulle</i> [All] <i>raamatu</i> [G] 'Jaan gave me a book'		
SVOP	<i>Jaan tegi käed mustaks</i> [Jaan made hand:NPl dirty:Trl] 'Jaan made his hands dirty'		
SVOA	<i>Jaan pani raamatu</i> [G] <i>lauale</i> [All] 'Jaan placed the book on the table'		

\* The study was partly supported by grant no. 5202 of the Estonian Science Foundation.

The basic word order in the NORMAL CLAUSE is SVX. Its subject is morphologically unmarked, that is, it stands in the nominative, and the verb agrees with the subject in person and number (cf. 5.2.1). The subject predicative and the locational adverbial may be joined with subject-NP by the same lexically empty verb *olema* 'to be', e.g. *Jaan on insener/haige* 'Jaan is an engineer/ill', *Jaan on toas* 'Jaan is in the room'. The verb *olema* appears in all tenses and exhibits all the essential morphosyntactic properties of Estonian verbs. The subject and the object predicative may occur in the marked form (cf. 5.2.3).

The INVERTED CLAUSE reveals inverted word order XVS. The clause is opened not by the subject but an adverbial or an oblique object expressing location, time, possessor, or experiencer. If there is a subject-NP in the clause, it may be marked in the partitive, e.g. *Klaasis on vesi* [N] 'There is water in the glass' – *Klaasis on vett* [P] 'There is some water in the glass'. The use of the partitive is obligatory in the (non-contrastive) negative clause, e.g. *Klaasis ei ole vett* [P] 'There is no water in the glass'. Actually, the subject may be missing, as in *Väljas müristab* [outside thunders] 'It's thundering outside', *Jaanil on piinlik* [Jaan:Ade is embarrassed] 'Jaan feels embarrassed'. In the clauses without a nominative subject the verb is always in 3Sg. The main semantic types of inverted clauses are existential, possessive, experiential clauses, and clauses of state. The existential and possessive clauses have the structure AVS and OblVS, respectively. In EXISTENTIAL CLAUSES the clause-initial constituent is an adverbial of location or time, and the clause performs a presentative function, as in *Aias* [Ine] *on* [are] *lilli* [PPI] 'There are some flowers in the garden', *Õues* [Ine] *jookseb* [runs] *lapsi* [PPI] 'Some children are running about in the yard'. The predicate of existence can be expressed both by the copula-like *olema*-verb and some other intransitive verbs. In POSSESSIVE CLAUSES the oblique object expresses the possessor and is in the adessive case. The possessor is typically animate, as *Jaanil* [Ade] *on* [is] *vend* [N] 'Jaan has a brother', but sometimes it may be inanimate as well, as in *Autol* [Ade] *on neli ratast* 'The car has four wheels'. Occasionally, possessive clauses may be built on the model of normal clauses using a special verb like *omama*, *evima* 'have', e.g. *Jaan* [N] *omab/evib* [has] *autot* [P] 'Jaan has a car'. The pattern of the normal clause is also used to form the *belong*-possession, using the *olema*-verb and the genitive possessor together with the pronoun *oma* 'one's own', e.g. *See auto on Jaani* [G] *oma* [own] 'This car belongs to Jaan', or the special *kuuluma*-verb 'belong', e.g. *See auto kuulub Jaanile* [All] 'This car belongs to Jaan'. In CLAUSES OF STATE the clause-initial adverbial of location or time is optional. The predicate may be verbal, e.g. *Väljas müristab* [thunders] 'It's thundering outside', or nominal, e.g. *Väljas on* [is] *külm* [N] 'It's cold outside', *Väljas läheb* [goes] *külmaks* [Trl] 'It's getting cold out-

side' Usually there is no subject, but one can find also clauses of state with the subject, e.g. *Väljas on* [is] *kõva tuul* [strong wind] 'Outside the wind is strong', *Praegu on* [is] *hommik* [morning] 'Now it's morning'. EXPERIENTIAL CLAUSES can be built on the pattern of possessive clauses, so that the experiencer is expressed by the clause-initial oblique object in the adessive, and the 'possessed' state is expressed by the subject-NP, as in *Jaanil* [Ade] *on* [is] *hirm* [fear] / *ei ole* [is not] *hirmu* [fear:P] 'Jaan has fear / Jaan has no fear'. This kind of state can be expressed also by the predicate adjective, e.g. *Jaanil* [Ade] *on* [is] *piinlik* [embarrassed] 'Jaan feels embarrassed', or the verb, e.g. *Jaanile* [All] *meeldivad* [like] *lapsed* [children] 'Jaan likes children'.

## 5.2. Nominal clause elements

### 5.2.1. Subject

The subject-NP of the normal clause is always in the nominative case. In Estonian grammar such a subject is called the total subject. The verb (in the indicative or imperative) usually agrees with the total subject in person and number, e.g. *Ma* [I] *jooksin* [1Sg] 'I was running' – *Sa* [You] *jooksid* [2Sg] 'You were running' – *Me* [we] *jooksime* [1Pl] 'We were running', (*Sa*) [You] *jookse* [Imp.2Sg]! '(You) run!' – *Te* [you] *jookske* [Imp.2Pl]! 'You run!' The verb formally agrees in number with the semantically singular but formally plural subject, e.g. *Teie* [you (polite plural)], *Peeter, eksite* [2Pl]! 'You, Peter, are wrong'. The number varies in case the subject is a quantifying phrase. The use of the plural is preferred if the subject opens the clause and the referent is quantitatively definite, cf. *Kümme meest parandasid* [3Pl] (unusual: *parandas* [3Sg]) *silda* 'Ten men were repairing the bridge' – *Silda parandas* [3Sg] (unusual: *parandasid* [3Pl]) *kümme meest* 'The bridge was being repaired by ten men', *Umbes kümme meest parandas* [3Sg] (unusual: *parandasid* [3Pl]) 'About ten men were repairing the bridge'. Usually singular conjoined NPs take a plural verb, but in the case of notional proximity the verb may occur in the singular as well, cf. *Mart ja Ants jooksevad* [3Pl] 'Mart and Ants are running' – *Rikkus ja kuulsus toovad* [3Pl] / *toob* [3Sg] *rohkem häda kui õnne* 'Wealth and fame bring misfortune rather than happiness'. When coordinating different persons, the person of the verb is reflected in the following way:

I/we + you [Sg/Pl] > we	<i>Mina/meie ja sina/teie sööme</i> [1Pl] 'I/we and you/you eat'
I/we + s/he/they > we	<i>Mina/meie ja tema/nemad sööme</i> [1Pl] 'I/we and he/they eat'
You [Sg/Pl] + s/he > you [Pl]	<i>Sina/teie ja tema sööte</i> [2Pl] 'You/you and he eat'

The subject of the inverted clause is either in the nominative or in the partitive (partial subject). In a notionally affirmative clause the partitive subject denotes quantitative indefiniteness of the subject's referent, e.g. *Klaasis on vett* [P] 'There is some water in the glass', *Meil on lootust* [P] 'We have some hope', *Aias kasvab lilli* [PPI] 'In the garden there grow some flowers'. Indefiniteness may be accompanied with the additional meaning of paucity. However, in most cases the partitive can be replaced by the nominative, e.g. *Aias kasvab lilli* [PPI] ~ *Aias kasvavad lilled* [NPI] 'Flowers grow in the garden', with the exception of a few verbs, such as *piisama* 'suffice', *jätkuma* 'suffice', *tunduma* 'seem', *immitsema* 'ooze', e.g. *Kõigile jätkus leiba* [P] / *\*leib* [N] 'There was enough bread for everybody'. In a notionally negative or hesitant inverted clause the subject is always in the partitive case, e.g. *Laual pole raamatut* [P] 'There is no book on the table', *Kas on mõtet* [P] *seda teha?* 'Is there any good reason to do it?' A partial subject does not make the predicate verb agree with the latter but remains in the 3<sup>rd</sup> person singular.

### 5.2.2. Object

An object-NP can be (a) only in the partitive or (b) in addition to the partitive (partial object) also in the genitive or nominative (total object). Only the partitive object occurs with verbs of cognition *armastama* 'love' (e.g. *Leena armastab lapsi* [PPI] 'Leena loves children'), *kartma* 'fear', *nägema* 'see' etc., verbs of movement and touching *kallistama* 'hug' (e.g. *Ema kallistas poega* [P] 'Mother hugged her son'), *peksma* 'beat' and with some other verbs, as *helistama* 'ring' (e.g. *Ta helistas kella* [P] 'He rang the bell'), *trahvima* 'fine', *ääristama* 'line', *alustama* 'begin', *harrastama* 'practise' etc. In the case of the verbs that allow case alternation the total object is used only if it denotes definite quantity (is quantitatively bounded) and the clause expresses a perfective activity, e.g. *Mees ehitas suvila* [G] 'The man built a summer house' but *Mees ehitas suvilat* [P] (imperfective activity) 'The man was building a summer house', *Ta sõi leiva* [G] *ära* 'He eat up the bread' but *Ta sõi leiba* [P] 'He was eating some bread' (quantitatively indefinite object, imperfective activity). The partial object alternates with the total object only in the affirmative clause. In the negative clause only the partial object can be used, e.g. *Ma ei ostanud leiba* [P] 'I didn't buy any bread'.

The total object is predominantly in the genitive, e.g. *Isa viis lapse* [G] *kooli* 'Father took the child to school'. The total object of the affirmative clause stands in the nominative if the object is in the plural, e.g. *Isa viis lapsed* [NPI] *kooli* 'Father took the children to school' or if the verb is in the

imperative mood, e.g. *Vii laps* [N] *kooli!* ‘Take the child to school!’, impersonal, e.g. *Laps* [N] *viiakse kooli* ‘The child is taken to school’, or the *da*-infinitive, e.g. *Isa ülesanne oli laps* [N] *kooli viia* ‘The father’s task was to take the child to school’ In the case of the first- and second-person pronouns and the reflexive pronoun (*ise*)*enese* ~ (*ise*)*enda* the use of the partitive is obligatory instead of the nominative and optional instead of the genitive, e.g. *Vii mind* [P] *kooli!* ‘Take me to school’, cf. *Vii laps* [N] *kooli!* ‘Take the child to school!’, *Pese ennast* [P] *puhtaks!* ‘Wash yourself clean!’, cf. *Pese laps* [N] *puhtaks!* ‘Wash the child clean!’, *Isa viis minu* ~ *mind* [G ~ P] *kooli* ‘Father took me to school’, *Ta pesi enda* ~ *ennast* [G ~ P] *puhtaks* ‘He washed herself/himself clean’

MEASURE ADVERBIALS behave similarly to the object in that they occur in the nominative/genitive or the partitive roughly under similar circumstances, e.g. *Ta suusatas viis* [N] *kilomeetrit* / *ühe* [G] *kilomeetri* ‘He skied five kilometres / one kilometre’ – *Ta ei suusatanud ühte* [P] *kilomeetritki* ‘He didn’t ski even a kilometre’, *Ootasin pool* [N] *tundi* / *ühe* [G] *tunni* ‘I waited for an hour’ – *Ma ei oodanud ühte* [P] *minutitki* ‘I didn’t wait even a minute’

### 5.2.3. Predicative

The predicative expresses a current or result state of the subject or object. The result state is usually marked in the predicative by the translative, e.g. *Laps jäi haige* [Trl] ‘The child fell ill’, *Laps külmetas end haige* [Trl] ‘The child caught cold’, *Jaan õppis kunstnikuks* [artist:Trl] ‘Jaan studied art’, *Vanemad koolitasid Jaani kunstnikuks* [Trl] ‘The parents trained Jaan to be an artist’ Sometimes the predicate expressing a result state may occur in the nominative as well, as in *Maja tuli suur* [N] *ja ilus* [N] ‘The house turned out large and beautiful’ The current state may be marked or non-marked in the predicative. As a complement of the copula-like verb *olema* ‘be’ the predicative is usually non-marked, that is, such a predicative is usually in the nominative, e.g. attribution: *Laps on haige* [N] ‘The child is ill’; proper inclusion: *Jaan on kunstnik* [N] ‘Jaan is an artist’ However, in the case of proper inclusion the predicate noun may be also in the translative or the partitive. The translative is used to express non-permanent or non-essential character of the state, as in *Ta oli mulle emaks* [Trl] ‘He served as a mother to me’, *Nastik oli vanasti koduloomaks* [Trl] ‘In earlier times the grass snake used to be a domestic animal’ (but not: *\*Lammas on koduloomaks* [Trl] ‘The sheep is a domestic animal’). The partitive is used if the inclusion relation is stressed. The plural partitive shows group inclusion, e.g. *Jaan on Eesti parimaid kunstnikke* [PPl] ‘Jaan is one of the best artists in Estonia’, the

singular partitive, however, shows a category membership (in the case of the words *liik* ‘kind, species’, *tõug* ‘breed’, *klass* ‘class’, *tüüp* ‘type’, *laad* ‘kind’, *sort* ‘variety’, *sugu* ‘kind’, *mast* ‘mast, kind’; *nägu* ‘face, kind’, *värv* ‘colour’ etc.), e.g. *Need hobused on sama tõugu* [P] ‘These horses are of the same breed’

As the complement of the verbs of seeming, staying, and functioning the predicative expressing the current state stands in the essive case, e.g. *Tulevik näis ilusana* [Ess] ‘The future looked bright’, *Ilm püsis soojana* [Ess] ‘The weather stayed warm’, *Jaan töötas õpetajana* [Ess] ‘Jaan worked as a teacher’ In the case of the verbs of seeming and staying the predicate adjective may be optionally in the nominative as well, e.g. *Tulevik näis ilus* [N] ‘The future looked bright’, *Ilm püsis soe* [N] ‘The weather stayed warm’ The essive is used in the *olema*-clause as well but only in the secondary predication. The main predication is locational, e.g. *Ta on haigena* [N] *voodis* ‘He’s in bed because he’s ill’, *Ta on meie delegaadina* [Ess] *Pariisis* ‘He’s in Paris where he performs the duties of our delegate’

The predicative in the nominative agrees with the subject in number, e.g. *Ma* [I] *olen noor/eestlane* [NSg] ‘I’m young / an Estonian’ – *Me* [we] *oleme noored/eestlased* [NPl] ‘We’re young/Estonians’ Agreement varies in the case of the translative and the essive. The predicative adjective in the translative usually does not agree with the subject or the object in number, e.g. *Me* [we] *jäime haigeks* [TrlSg] / *\*haigeteks* [TrlPl] ‘We fell ill’ In the case of the essive both agreement and non-agreement are possible, e.g. *Nad* [they] *jõudsid koju läbimärgadena ~ läbimärjana* [EssPl ~ Sg] ‘They arrived home soaking wet’ The predicative noun in the translative and the essive usually agrees with the subject or the object in number, e.g. *Nad* [they] *sobivad/saadeti mulle abilisteks* [TrlPl] ‘They suit / were sent to me as assistants’, *Nad* [they] *töötasid minu abilistena* [EssPl] ‘They worked as my assistants’ However, if the noun rather expresses a property or state than the bearer of the property or the person in that state, thus being semantically closer to the adjective, then the singular is preferred also in the case of a plural subject or object, e.g. *Lapsed* [Pl] *jäid orvuks* [TrlSg] ‘The children were orphaned’, *Koolmeistreid* [Pl] *peetakse maa soolaks* [TrlSg] ‘Schoolteachers are regarded as the salt of the earth’

#### 5.2.4. Oblique objects and adverbials

In oblique objects and adverbials semantic roles can be expressed by cases and p-positions (ignoring here adverbs) as follows (cf. Table 2).

**Table 2.** Semantic roles in oblique objects and adverbials

Semantic role	Form	Example
recipient	Nall	<i>Ta andis sõbrale raha</i> 'He gave his friend some money'
(temporary)	Ng+kätte	<i>Ta andis auto sõbra kätte</i> 'He turned the car over to his friend'
possessor and experiencer	Nade	<i>Sõbral on raha</i> 'The friend has got the money'
(temporary)	Ng+käes	<i>Tal on häbi</i> 'He's ashamed' <i>Auto on sõbra käes</i> 'The car is in his friend's hands'
• source	Nabl	<i>Sõber sai temalt raha</i> 'The friend got the money from him'
(temporary)	Ng+käest	<i>Sõber sai tema käest auto</i> 'The friend got the car from him'
agent and force (in passive clause)	Ng+poolt	<i>Spetsialistide poolt anti projektile eitav hinnang</i> 'The project was not approved by the specialists'
	Nela	<i>Kogu kuusik oli tuulest / tuule poolt maha murtud</i> 'The entire spruce forest had been broke down by wind'
instrument	Ncom	<i>Ta kirjutas pliiatsiga kirja</i> 'He wrote the letter in pencil'
companion	(koos+)Ncom	<i>Ta saabus siia (koos) naisega</i> 'He arrived here together with his wife'
	ilma+Nabe	<i>Ta oli teatris ilma naiseta</i> 'He was at the theatre without his wife'
spatial roles		
location	Nine/ade	<i>Ta on toas</i> 'He's inside' <i>Ta on maal</i> 'He's in the country'
destination	Nill/all	<i>Ta läks tuppa</i> 'He went inside' <i>Ta läks maale</i> 'He went to the country'
source	Nela/abl	<i>Ta tuli toast</i> 'He came from inside' <i>Ta tuli maalt</i> 'He came from the country'
boundary	(kuni+)Nter	<i>Ta jalutas (kuni) metsani</i> 'He walk as far as the forest'
path	Ng+kaudu	<i>Ta tuli Helsingi kaudu</i> 'He came via Helsinki'
	läbi+Ng	<i>Ta tuli läbi metsa</i> 'He came through a thick forest'
time		
• time position	Nade	<i>Ta tuli õhtul / 5. jaanuaril</i> 'He came in the evening / on January 5'
	Nine	<i>Tema sünnipäev on jaanuaris</i> 'His birthday is in January'
	Nn	<i>Eelmine aasta oli soe talv</i> 'Last year the winter was warm'
finishing time	(kuni+)Nter	<i>Nad töötasid (kuni) hommikuni</i> 'They worked until morning'

starting time	Nela(+saadik)	<i>Koosolek algab kella kolmest</i> 'The meeting will start since three' <i>Eilsest saadik pole siin elektrit</i> 'We've been without electric power since yesterday'
cause	Nela Ng+tõttu/ pärast	<i>Olime jahmatusest oimetud</i> 'We were stunned' <i>Ta vallandati lohakuse pärast</i> 'He was dismissed because of negligence'
purpose	Ntrl  Ng+jooks/ tarvis	<i>Raha oli mõeldud ehituseks</i> 'The money was intended for construction' <i>Raha oli mõeldud ehituse jaoks</i> 'The money was intended for construction'

### 5.3. Word order in the clause

The basic word order in the normal clause is SVX (i.e. subject – verb – object or adverbial), e.g. *Mees ehitab maja* 'A man is building a house', and in the inverted clause it is XVS, e.g. *Aias kasvab lilli* 'In the garden there grow some flowers'. The word order is flexible, i.e. the pragmatic order variants are allowed in addition to the basic order.

In non-negated declarative main clauses the finite verb tends to retain THE SECOND POSITION in all the thematic variants (V2), e.g. *Meie pere* [S] *joob* [V] *hommikukohvi* [O] *kodus* [A] 'Our family drinks the morning coffee at home' – *Hommikukohvi* [O] *joob* [V] *meie pere* [S] *kodus* [A].

The finite verb can be located AT THE END of the clause: (1) in negative clauses if the clause begins not with the subject but the object, adverbial or negation word, e.g. *Kodus ma hommikul tavaliselt mannaputru ei* [Neg] *söö* [V] 'At home usually I don't eat semolina pudding', *Ega* [Neg] *ma rumal (ei)* [Neg] *ole* [V] 'I'm not a fool after all'; (2) in questions that begin with a question word, e.g. *Kuidas* [how] *te hommikul nii ruttu siia jõudsite* [V]? 'How did you get here so quickly in the morning?'; (3) in some subordinate clauses: (a) in indirect questions and relative clauses, e.g. *Ma tean, miks arst seda tege-ma pidi* [V] 'I know why the doctor had to do it', *Ma tunnen seda meest, kel-lega Jaan eile rääkis* [V] 'I know the man that Jaan talked to yesterday'; (b) in subordinate clauses with a negative or interrogative main clause, e.g. *Ta ei* [Neg] *räägi nii mitte* [Neg] *sellepärast, et ta ise seda näinud oleks* [V], *vaid ..* 'He does not talk so rather because he has witnessed it himself but ..', *Kas ta räägib nii sellepärast, et ta ise seda näinud on* [V]? 'Does he talk so because he witnessed it himself'; (c) in clauses of time and condition beginning with the conjunction *kui* 'if, when', e.g. *Lind värises, kui* [when] *ma ta pihku võtsin* [V] 'The bird trembled when I took it in my hand', *Kui* [if] *sa seda teed* [V], *juhtub õnnetus* 'If you do it, there will be a misfortune'. In each of these cases the clause-final position of the verb is not the only possibility.

The positioning of the verb AT THE BEGINNING of the clause and the resulting inversion can express a communicative function. Thus, the verb can open the clause in the following cases: (1) in yes-no questions without the question particle *kas*, e.g. *Oled [V] sa hulluks läinud?* 'Are you crazy?' = *Kas [Q] sa oled hulluks läinud?*; (2) in ordinary imperative clauses in parallel to the V2-order, e.g. *Käi [V] sa vahepeal kodus ära* 'Go home in the meanwhile' = *Sa käi [V] vahepeal kodus ära*, *Tulgu [V] ta siia* = 'He should come here' = *Ta tulgu [V] siia*; as the only possibility in imperative clauses expressing warning or prohibition, e.g. *Katsu [V] sa seda teha!* 'Just you dare to do it'; (3) in conditional clauses and requests in the form of conditional clauses instead of the conjunction *kui*, e.g. *Saaksin [V] ma lehmast head hinda, ma ostaksin hobuse* 'If I got a good price for the cow, I would buy a horse' = *Kui [if] ma saaksin [V] lehmast head hinda, ma ostaksin hobuse*, *Läheks [V] nad ometi kord minema!* 'If only they would leave at last' = *Kui [if] nad ometi kord minema läheksid [V]!*; (4) in exclamatory clauses instead of *küll* 'how', e.g. *Oled [V] sina alles tubli!* 'How come you're so diligent!' = *Küll [how] sa oled [V] alles tubli!* In addition, the verb occurs clause-initially also: (5) in narrative texts (rendering past activities), e.g. *Istun [V] mina oma kabinetis ja kirjutan aruannet* 'I'm sitting in my study and writing the report'; (6) with the focused verb, e.g. *Lahkun [V] ma hommikul* 'I leave in the morning', *Ei tee [V] ma seda* 'I'm not going to do it'

## 5.4. Verb and verb categories

### 5.4.1. Verb expressions

In Estonian predicates can be expressed by single finite verbs (including analytic verb forms), e.g. *Poiss loeb / on lugenud raamatut* 'The boy is reading / has read the book' and verb combinations with other words:

- verb + adverb particle (particle verb). The particle can express (a) location or direction, e.g. *kukkus alla* 'fell off' (*Ta kukkus katuselt alla* 'He fell off the roof'); (b) perfectivity, e.g. *loeb läbi* 'reads through' (*Ta luges raamatu läbi* 'He read through the book'), *joob ära* 'drinks up' (*Laps joob piima ära* 'The child drinks up the milk'); (c) state, e.g. *kukub kokku* 'collapses' (*Maja oli kokku kukkunud* 'The house had collapsed'); (d) modality, e.g. *läheb vaja* 'need' (*Mul ei lähe seda siiski enam vaja* 'Still I don't need it anymore'). Particle verbs can be either idiomatic, as *naerab välja* 'ridicules', lit. 'laughs out', or non-idiomatic, as *läheb alla* (*Ta läheb trepist alla* 'He goes down the staircase');

- verb + noun/adjective phrase ("expression verbs"), e.g. *saab aru* 'understands' (*Ta saab su jutust aru* 'He understands your talk'), *teeb kindlaks*

‘makes certain; identifies’ (*Õnnetuse põhjus tehti kindlaks* ‘The cause of the accident was identified’). The verb expressions of this type are always idiomatic. The particle verbs and “expression verbs” are called also the phrasal verbs;

- verb + non-finite verb: various combinations of finite verbs with non-finite verbs, the finite verb can express the beginning of action, e.g. *hakkab minema* ‘begins to go’ (*Ta hakkab koju minema* ‘He begins to go home’), modality, e.g. *võib minna* ‘can go’ (*Ta võib koju minna* ‘He can go home’), causation, e.g. *paneb käima* ‘starts’, lit. ‘makes (the engine) work’ (*Jaan paneb mootori käima* ‘Jaan starts the engine’) or manner, e.g. *kihistab naerda* ‘giggles’, lit. ‘giggles to laugh’ (*Vilja kihistab naerda* ‘Vilja is giggling’). The manner of the action can be expressed also by the construction with the converb, as *Vilja naeris kihistades* ‘Vilja was giggling’, lit. ‘Vilja laughed giggling’. However, the so-called ‘colorative’ constructions, where the manner of action is expressed by the finite verb and the action itself by the infinitive, are more common in Estonian;

- verb + finite verb: some constructions resembling serial verbs, mainly combinations of verbs of motion with some other finite verb, as *Mine tee uks lahti* ‘Go open the door’, *Tule võta leiba* ‘Come get the bread’, *Lähen jooksen toon selle ära* ‘I’ll go run (and) fetch it’

### 5.4.2. Voice

Estonian has no Indo-European-like proper passive, i.e. subjective ACTION PASSIVE. The voice marked by special morphological form of the verb is called impersonal in Estonian grammar (cf. 3.6.1). The impersonal clause is subjectless, i.e. while the object is not promoted to the subject, it describes an action performed by an indefinite human agent and can be derived also from intransitive clauses, e.g. *Mees loeb raamatut* ‘The man is reading the book’ → *Loetakse [Ips] raamatut* ‘The book is being read; someone is reading the book’, *Mees jookseb* ‘The man is running’ → *Joostakse [Ips]* ‘Someone is running’. However, the total object of the passive clause has some features that are characteristic of the subject – it is in the nominative case, it usually opens the clause, and in the past compound tenses the verb optionally agrees with it in number (the present: *Raamatud loetakse läbi* ‘The books are read through’; the imperfect: *Raamatud loeti läbi* ‘The books were read through’; the perfect: *Raamatud on loetud läbi* ‘The books have been read through’; the pluperfect: *Raamatud [Pl] oli(d) [Pl] loetud läbi* ‘The books had been read through’). Another characteristic feature of the proper passive is the limited possibility to add an agent phrase NPg + *poolt* ‘by’ (in the clauses

with the nominative object), as in *Vaenlased aeti meie vägede poolt maalt välja* 'The enemies were driven out of the country by our troops'

In case the agent is the speaker, or among the agents there is a speaker, the predicate of the passive clause can take the form 3Sg of *saama*-verb 'become' + *tud*-participle, e.g. *Maja kallal saab/sai kõvasti vaeva nähtud* 'A lot of effort was put into the house'

RESULTATIVE (STATIVE) PASSIVE clauses have a subject and express a state into which the subject's referent (object of action) has entered as a result of the action, e.g. *Uksed olid avatud* 'The doors were open', *Nad olid tema käitumisest üllatatud* (= *üllatunud*) 'They were surprised by his behaviour' Passivity is morphologically indicated by the *tud*-participle of a transitive verb. However, in that case the latter is not part of the impersonal form of the verb but acts as the predicative. That it is the subject and not the object is proved by the agreement of the *olema*-verb 'be' and a different paradigm of tense forms in comparison with the impersonal passive (the present: *Uksed* [Pl] *on* [Sg = Pl] *avatud* 'The doors are open'; the imperfect: *Uksed* [Pl] *olid* [Pl] *avatud* 'The doors were open'; the perfect: *Uksed* [Pl] *on* [Sg = Pl] *olnud* *avatud* 'The doors have been open'; the pluperfect: *Uksed* [Pl] *olid* [Pl] *olnud* *avatud* 'The doors had been open'). It is also possible that the auxiliary is impersonalized in the case of the human subject, for example, *Oldi* [Ips] *üllatatud* '(People) were surprised' The latter circumstance, however, is not a clear indicator of stativity because the spoken language reveals also cases of double impersonal, as *Uksi ei oldud* [Ips] *suletud* 'The doors had not been closed'

To express the state that is achieved by a certain point of time, the *saama*-verb 'become' is used also for the stative passive in place of the *olema*-verb 'be', e.g. *Laud saab varsti kaetud* 'The table will have been laid soon', *Tööd saavad tehtud* 'The jobs will have been completed' In the case of negation the construction *jääma* 'remain' + *mata*-form is used, e.g. *Laud jäi katmata* 'The table remained unlaid'

### 5.4.3. Tense

Estonian makes a morphological distinction between past and non-past events. Of three past tenses the imperfect expresses a single plane, expressing the absolute past, i.e. an action that preceded the moment of speech, e.g. *Elasin varem Tartus* 'Earlier I used to live in Tartu' The perfect and the pluperfect, however, express two planes, where the *olema*-verb 'be' expresses, respectively, the absolute present or the absolute past. The participle, however, expresses the relative past (axis of anteriority), as in *Selle raamatu on tõlkinud*

X 'This book was translated by X', *Eilseks oli ta oma töö juba lõpetanud* 'He had completed his job by yesterday' In contemporary Estonian one can observe the tendency to use simple tenses instead of compound tenses – the present or imperfect instead of the perfect depending on whether the present or the past plane predominates in the perfect, e.g. *Ta töötab* (pro *on töötanud*) *juba 20 aastat* 'He has worked already for 20 years', *Lõpetasin* (pro *olen lõpetanud*) *Tartu ülikooli* 'I graduated from (have graduated from) Tartu University'; the imperfect is used instead of the pluperfect, e.g. *Juhtus see, mida juba kaua oodati* (pro *oli oodatud*) 'What happened was what had been expected for a long time' Estonian has no morphological form for the future. For the expression of the future the verb remains in the present and lexical means are applied, for example time adverbials *homme* 'tomorrow', *varsti* 'soon' etc., e.g. *Ma sõidan homme koju* 'I travel home tomorrow' In the case of a perfective action the present form of the verb refers to the future also without a time adverbial. For example, the sentence *Mees ehitab endale suvila* 'The man will build a summer house for himself', where the total object *suvila* 'summer house' refers to the perfectivity of the action (cf. 5.2.2), the futureness of the action is unambiguous. The futureness of the action is often indicated by the present forms of the verbs *tuleb* 'comes', *läheb* 'goes', *jääb* 'remains', *saab* 'gets', e.g. *Siia tuleb ilus maja* 'There will be a nice house here' The verb *saama* 'get' has given rise to special auxiliary verb that expresses the future. The construction the present form of the *saama*-verb + the *ma*-infinitive of the main verb is mostly used in the case of a non-agentive process, e.g. *Elu saab seal raske olema* 'Life will be difficult there' Also the verb of beginning *hakkama* 'begin, start' is undergoing the process of becoming an auxiliary verb. In addition to expressing the beginning (*Ma hakkas süüa* 'I'll start eating', *Isa hakkab vanaks jääma* 'Father is getting old'), this verb is used together with the *ma*-infinitive of the main verb to express the future, e.g. *Loengud hakkavad toimuma reedeti* 'The lectures will start to take place on Fridays'

#### 5.4.4. Aspect and aktionsart

In fact, ASPECT does not exist as a verbal grammatical category in Estonian. The aspectual opposition perfective – imperfective is manifested in the clause as a whole. It is expressed partly by grammatical and partly by lexical means. It can be expressed grammatically by nominative/genitive versus partitive forms of the direct object, e.g. the perfective: *Poiss ostis raamatu* [G] / *raamatud* [NPI] 'The boy bought a book / the books' – the imperfective: *Poiss luges raamatut* [P] 'The boy was reading a book', or by the measure

phrases of duration and distance, e.g. perfective: *Ta jooksis kaks [two:N] kilomeetrit* 'He was running a two-kilometre distance' – the imperfective: *Ta jooksis kaht [P] kilomeetrit* 'He was running a two-kilometre distance'. A nominative/genitive object is not always sufficient to indicate perfectivity. Therefore, prefix-like adverbs, such as *ära* 'off, away', *läbi* 'through', *välja* 'out', *maha* 'down', *üles* 'up' are often used with the verbs, forming particle verbs, e.g. *ära sööma* 'eat up' (*Jaan sõi supi [G] ära* 'Jaan ate up the soup'), *läbi lugema* 'read through' (*Jaan luges raamatu [G] läbi* 'Jaan read through the book'). The same function is performed by adverbials that make the boundary explicit, e.g. *Ta luges raamatu [G] ribadeks [shred:Trl]* 'The book became dog-eared after her/his reading it'.

Also the AKTIONSAKTS are expressed mainly lexically or by means of word-formation. For example, the affix *-tse-* (*nukrutsema* 'to feel sad') expresses continuousness, *-ata-* (*-ahta-*) (*seisatama* 'to stop') momentariness, *-le-* (*vehklema* 'to fence') frequentativeness (cf. 4.1.1). It is possible to express morphosyntactically progressive and ingressive aktionsarts. Progressivity usually remains unmarked or is marked by adverbials, e.g. *Ta loeb (parajasti) [just now] ajalehte* 'He is reading the newspaper'. However, optionally it may be expressed by the construction: a present or past form of the *olema*-verb 'be' + the *mas*-form of the main verb, e.g. *Kellad helisevad = on helisemas* 'The bells are ringing', *Staadionil toimub = on toimumas parajasti meeste kaugushüpe* 'At the stadium the men's long jump is in progress'. In normal clauses this means of expression is possible only in the case of non-active durative verbs. In the case of agentive verbs the *mas*-construction has a locative meaning, e.g. *Kus ta on?* 'Where is he?' – *Ta on suusatamas* 'He went skiing'. In the existential clause, which brings into focus the meaning of being and not action, the *mas*-construction has the meaning of progressivity also in the case of agentive verbs, as in *Siin on suusatamas nii noori kui ka vanu* 'Both the young and the old can be seen skiing here'. If the verb expresses a situational change, then the *mas*-construction has the meaning of ingressivity, more precisely, it will indicate a situation that is due to begin in the near future, e.g. *Bensiin on lõppemas* 'The petrol is about to end', *Laps on uinumas* 'The child is about to fall asleep'. The avertive meaning 'action narrowly averted', which is close to the latter, is expressed by the construction: the imperfect of the modal verb *pidama* 'must, have to' + *ma*-form of the main verb, e.g. *Ma pidin kukkuma* 'I was about to fall down'.

### 5.4.5. Modality

Modality (possibility and necessity) is expressed mainly lexically, but there are some grammatical means as well. Deontic possibility is expressed by the present passive participle (*tav*-participle), e.g. *See ülesanne on lahendatav* 'This problem can be solved' Its negative counterpart is the *matu*-form (*ma*-infinitive + caritive suffix), e.g. *See ülesanne on lahendamatu* 'This problem cannot be solved' Deontic necessity is inferred from the imperative and the jussive, e.g. *Mine* [Imp] *koju!* 'Go home', *Mina andku* [Jus] *see pakk Juhani kätte* 'I should give this parcel to Juhan' and from the construction *las* + present indicative or *da*-infinitive of the main verb, e.g. *Las see jutt jääb/jääda meie vahele* 'Let this talk remain between ourselves', and epistemic possibility from the quotative and the conditional, e.g. *Tal olevat* [Quo] *õigus* 'He is said to be right', *Sellega tuleks* [Cnd] *toime igauks* 'Everyone would cope with this'

The Estonian modal verbs that have partially lost syntactic independence include *saama* 'can', *võima* 'can, may', *pidama* 'must, have to', *tohtima* 'be allowed', *näima* 'seem', *paistma* 'seem', *tunduma* 'seem' The argument structure of the sentence does not depend on their meaning, cf. *Ta jääb hiljaks* 'He will be late' – *Ta võib hiljaks jääda* 'He may be late', *Hakkab sadama* 'It is going to rain' – *Võib sadama hakata* 'It may start to rain' The modal verbs *tulema* 'have to', *tarvitsema* 'need', *maksma* 'be worth (doing)', *pruukima* 'use', *tasuma* 'be worth (doing)', *vaja olema/minema* 'be needed', *tarvis olema/minema* 'be needed' are less grammaticalized because they require a pattern with the adessive oblique, cf. *Ta võtab rohtu* 'He takes medicine' – *Tal* [Ade] *tuleb/tasub rohtu võtta* 'He has to take medicine / he will benefit from taking medicine'

The most frequent modal verbs are *võima* 'may', *saama* 'can' and *pidama* 'must, have to', which have developed from expressing dynamic modality to expressing deontic and epistemic modality. The *võima*-verb has grammaticalized most. It is used in all three modal meanings, whereas it can be used to express probability in any situation. The verb *saama* 'can' is the least grammaticalized modal verb. It expresses primarily dynamic possibility (ability). It is hardly ever used to express deontic possibility. It is occasionally used in the epistemic meaning, but only when describing involuntary situations in general statements. The verb *pidama* 'must, have to' expresses first and foremost dynamic or deontic necessity. It occurs in the epistemic meaning only in the imperfect indicative (which expresses at the same time a quotative meaning) or the conditional mood:

	Dynamic	Deontic	Epistemic
Possibility	<i>Sina <b>saad</b> mind aidata</i> ‘You can help me’  <i>Sina <b>võid</b> mind aidata</i> ‘You can help me’	<i>Kaasa <b>saab</b> võtta 10 krooni</i> ‘One is allowed to carry 10 kroons’  <i>Sina <b>võid</b> koju minna</i> ‘You can go home’	<i>Ootamatusi <b>saab</b> alati juhtuda</i> ‘There can always be unexpected situations’  <i>Ootamatusi <b>võib</b> alati juhtuda</i> ‘There can always be unexpected situations’
Necessity	<i>Ma <b>pean</b> magama minema</i> ‘I need to go to bed’	<i>Sa <b>pead</b> koju minema</i> ‘You must go home’	<i>Ilm <b>peaks</b> [Cnd] külmemaks minema</i> ‘The weather should get colder’

#### 5.4.6. Evidentiality

In Estonian evidentiality has developed into a grammatical category. Reported evidentiality is manifested morphologically in the quotative mood, e.g. *ma lahkuvat* ‘I am said to leave’, *sa lahkuvat* ‘You are said to leave’ etc. The jussive mood, too, can be interpreted as reported evidentiality, e.g. *mina lahkugu* ‘I should leave; I am told to leave’, *sina lahkugu* ‘You should leave; You are told to leave’ etc. The forms of both moods have developed from other verb forms by regrammaticalization. The *vat*-form of the quotative developed from the present participle; the form of the jussive originated as the third person form of the imperative. In Estonian quotativity is expressed by some other forms as well: (a) the modal construction with the auxiliary verb *pidama* ‘must, have to’ in imperfect form, e.g. *Ta **pidi** järgmisel nädalal siia tulema* ‘He is said to come here next week’; (b) *da*-infinitive in the function of the predicate, e.g. *Ta **olla** haige* ‘He is said to be ill’; (c) the pluperfect or the past participle alone, e.g. *Ta **oli** käskinud / käskinud mind oodata* ‘He is said to have told me to wait’ The forms of the verb *pidama* ‘must, have to’, both the imperfect and the present, can express inferential evidentiality as well, e.g. *See **pidi/peab** küll rebane olema, kes need kanad ära viinud on* ‘It must have been / must be a fox who stole the chickens’ Also, the perfect forms have implications of inferential evidentiality, as in *Poiss **on** jälle kaklemas käinud* ‘The boy has been fighting again’

## 5.5. Non-declarative sentences

### 5.5.1. Interrogative sentences

YES-NO QUESTIONS are formed by means of the interrogative particle *kas*, which is located at the beginning of the clause. In negative clauses also the particle *ega* is used (cf. 5.5.4). Word order is the same as in declarative clauses, cf. *Sa tuled täna meile* 'You will come to visit us today' – *Kas sa tuled täna meile?* 'Will you come to visit us today?', *Ega sa (ei) tule täna meile?* 'Won't you come to visit us today?', or the verb may be positioned at the end of the clause, e.g. *Kas sa täna meile tuled?* 'Will you come to visit us today?', *Ega sa täna meile ei tule?* 'Won't you come to visit us today?' In many cases the yes-no is formed by inversion of the verb and the first argument (usually the subject), whereby the verb is positioned at the beginning of the clause, e.g. *Tuled sa homme meile?* 'Will you come to visit us tomorrow?', *On sul täna aega?* 'Do you have any time today?' In colloquial language the question is sometimes expressed without the question word or inversion, only by rising intonation of the verb; word order remains the same as in the declarative clause, or the verb is positioned at the end of the clause, e.g. *Sa tuled homme meile?* *Sa homme meile tuled?* 'Will you come to visit us tomorrow?' In spoken language questions can be formed by means of the clause-final tags *või* 'or', *ah* 'uh', *mis* 'what' etc., e.g. *Ta läks ära või?* lit. 'He left or?', *Maailm läheb hukka, ah?* 'The world is going to the dogs, uh?', *Siin on mõnus olla, mis?* 'It's cosy in here, (or) what?' In the case of questions about preferences the tags *ega* (only in negative sentences), *eks (ole)*, *on ju* etc. can be used, e.g. *Sa ei usu seda kõike, ega?* 'You don't believe all this, do you?', *Me jõuame täna kohale, eks (ole)?* 'We'll reach the destination today, won't we?' The focused element of the yes-no question is marked either by contrastive stress alone or together with the clause-final position, e.g. *Kas sina viid lapse kooli?* *Kas lapse viid kooli sina?* 'Will you take the child to school?'

Alternative questions are formed with the help of the coordinate conjunction *või* 'or', e.g. *Ka sa tuled või ei (tule)?* 'Will you come or not?', *Kas me sõidame rongiga või bussiga?* 'Shall we travel by train or by bus?'

CONSTITUENT QUESTIONS are formed by means of interrogative pronouns and interrogative pro-adverbs, which are positioned at the beginning of the sentence, e.g. *Kes sa oled?* 'Who are you?', *Missugune inimene ta on?* 'What kind of person is he?', *Kuhu te lähete?* 'Where are you going to?', *Kui kaua see film kestab?* 'How long will this film last?' VP is questioned by *mida/mis tegema?* 'do what' e.g. *Mida sa teed?* 'What are you doing?' – *Sõidan autoga Tartust Tallinnasse* 'I'm driving from Tartu to Tallinn' Questions can be asked about any constituents, including the constituents of non-finite

clauses but not those of finite subordinate clauses, e.g. *Kuhu sa soovitud mul sõita?* 'Where do you recommend me to travel?' – *\*Kuhu sa tahaksid, et ma sõidan?* *\*Where do you want I travel?* It is also possible to ask questions about several constituents in the same clause, e.g. *Kes kuhu läheb?* 'Who is going where?' In the echo question the question words are either in their normal sentence-initial position or in the sentence-final position or take the place of the questioned elements, e.g. *Jaan ehitab laiule maja* 'Jaan is building a house on a small island' – *Kuhu Jaan maja ehitab?* *Jaan ehitab maja kuhu?* *Jaan ehitab kuhu maja?* 'Where is Jaan building the house?'

### 5.5.2. Imperative sentences

Commands are expressed by means of the imperative mood (cf. 3.6.2), e.g. *Sa räägi!* lit. 'You speak', *Rääkigem!* 'Let's speak', *Te rääkige!* lit. 'You (Pl) speak' Omission of the 1<sup>st</sup> person plural pronoun is obligatory, 2<sup>nd</sup> person pronouns are rarely used. There is no special negative imperative verb form, but the negative imperative is formed by combining the negative imperative auxiliary verb *ära* with the corresponding imperative form of the main verb, e.g. *Ära räägi seda kellelegi!* 'Don't tell anybody about it' The 1<sup>st</sup> person imperative plural belongs to the high style, e.g. *Laulgem üks isamaalaul!* 'Let's sing a patriotic song', *Ärgem hooligem ajutistest raskustest!* 'Don't care about temporary difficulties' In the neutral style the 1<sup>st</sup> person indicative plural is used, e.g. *Sõidame koju!* 'Let's go home' The negative imperative auxiliary usually takes then the general personal ending *-me* instead of *-gem/-kem*, e.g. *Ärgem rääkigem ~ ärme räägime seda kellelegi!* 'Let's not tell anyone about it' In informal speech also the form *ärme* + present indicative stem without an ending can be used, e.g. *Ärme räägi seda kellelegi!* 'Let's not tell anyone about it' A command can be expressed by means of the jussive as well. The jussive shows that the listener has forwarded the speaker's command to a third party, e.g. *Ta/nad rääkigu* 'He/they should speak' but it may also be used to indicate that the command originated from the 3<sup>rd</sup> person. In that case it expresses evidentiality, e.g. *Ma/sa/ta/me/te/nad rääkigu / ärgu rääkigu* 'I/you/he/we/you/they must speak on someone's order' (cf. 5.4.6).

In addition to the imperative mood there are some other means to express the command: (a) the particle *las* 'let' followed by the verb expresses in the case of the third person indirect order or permission. e.g. *Las Jüri helistab mulle* 'Jüri should call me' In the case of the first person it expresses only permission, e.g. *Las ma räägin lõpuni* 'Let me speak until the end'; (b) the question form (especially together with the conditional mood and/or nega-

tion) is used to express a weaker command, e.g. *Kas te ei ootaks* [Cnd] *natuke?* 'Couldn't you wait a little'; (c) the declarative form (the verb being in the indicative), the *da*-infinitive, or the independent complement clause beginning with the conjunction *et* 'that' are used to express a strong command, e.g. *Sa jäta*d [Ind] *kõik sennapaika ja lähed* [Ind] *koju!* 'You'll leave everything as it is and go home', *Laiali minna* [Inf]! 'Dissipate', *Mitte juttu ajada* [Inf]! 'No talking', *Et sa siit kaod!* 'Get lost'

### 5.5.3. Minor non-declarative sentences

OPTATIVE SENTENCES, which show that the speaker desires that an event should take place but does not seek its happening, are of two kinds: (a) the clauses presented as conditional clauses that begin with the conjunction *kui* 'if' or a verb, e.g. *Kui pääseks vaevast!* 'If only one could get rid the trouble', *Võetaks meid tõsiselt!* 'If only someone took us seriously'; (b) the clauses presented as object clauses that begin with the complementizer *et* 'that', e.g. *Et me vastu peaksime!* 'That we could stand it' An optative clause is always in the conditional mood.

The structure of EXCLAMATORY SENTENCES can take the form of: (a) constituent question, e.g. *Kui hästi ta ujub!* 'How well he can swim', *Kuidas kõik on muutunud!* 'How everything has changed', *Keda ma näen!* 'Who can I see'; (b) a declarative sentence that begins with the particle *küll* and/or includes the particles *alles*, *vast*, *ikka*, *aga* before the focused constituent, e.g. *Küll sa oskad (ikka) peenelt käituda!* 'You can behave smartly indeed', *On siin aga palav!* 'It's hot indeed here' Usually an exclamatory sentence with *küll* has direct word order; in case *küll* is absent, the verb-initial inverted order is used, cf. *Küll sina* [S] *oled* [V] *alles tubli!* 'You're excellent indeed' – *Oled* [V] *sina* [S] *alles tubli!* Exclamatory sentences have specific intonation, which is characterized by the fact that the fundamental frequency is rather high and the focus of the exclamation is marked.

### 5.5.4. Negation

SENTENTIAL NEGATION in Estonian is expressed by means of the negative particle *ei*, which usually immediately precedes the verb, e.g. *Täna ajalehed ei ilmu* 'No newspapers will be published today' The particle is historically the 3Sg form of the previous negative auxiliary. The main verb does not carry inflections of person and number, and if the person is not clear from the context, personal pronouns have to be used. The verb *olema* 'be' has two

negative forms: *ei ole* and *pole* (< *ep + ole*), e.g. *Ta ei ole = pole rumal* 'He is not stupid' In the imperative and the jussive the prohibition is expressed by the partially inflected negative auxiliary *ära* (*ärge, ärgem, ärgu*) together with the imperative form of the main verb, e.g. *Ära tee rumalusi!* 'Don't make any stupid things!' Unlike the negative particle *ei*, the auxiliary verb *ära* may be separated from the main verb by other words, e.g. *Ära homme tule* 'Don't come tomorrow!' (but cf. \**Ma ei homme tule*). In emphatic sentences, however, the particle *ei* is separated from the verb. In that case it is in the sentence-initial position whereas the verb may be moved to the end, e.g. *Ei mina seda tea!* 'No, I don't know it'

In negative yes-no-questions the negative particle *ega* can open the clause. In that case the verb is in the negative form, e.g. *Ega te ei käinud seal?* 'Did you visit this place?', *Ega te ei lubaks mind läbi?* 'Could you allow me to pass?'

Negation within an infinitive clause is expressed by the particle *mitte*, which is placed immediately before the infinitive form, e.g. *Palun teid mitte karjuda!* 'Don't shout please!', *Ta paistab sellest mitte hoolivat* 'It seems that he doesn't care', *Mitte hoolides sõpradest, kaotame nende usalduse* 'Neglecting our friends leads to losing their trust'

As a secondary modification, negative sentences reveal a change in the case marking of the object. The direct object in negative sentences is always in the partitive case, cf.: *Ma ehitasin paadi* [G] / *paati* [P] 'I built a boat / I was building a boat' – *Ma ei ehitanud paati* [P] 'I did not build a boat'

CONSTITUENT NEGATION. In the case of the opposition *not X but Y* the negational particle *mitte* is placed immediately before the negated constituent, whereas the verb is usually also in the negative form, e.g. *See ei ole mitte raha, mida ta ihaldab, vaid tunnustus* 'It is not the money that he is craving for but recognition' However, the verb may be affirmative as well, as in *See on mitte raha, mida ta ihaldab, vaid tunnustus*. The negative verb is obligatory if the predicate is in the scope of negation, e.g. *Kass mitte ei maga, vaid on surnud* – \**Kass mitte magab, vaid on surnud* 'The cat is not sleeping but is dead', or if its scope is before the predicate, e.g. *Mitte isa ei lähe reisima, vaid ema* – \**Mitte isa läheb reisima, vaid ema* 'It is not the father who goes on a trip but the mother' It is also possible to place the constituent in the scope of negation by emphasis only, without using the particle *mitte*, e.g. *Laps ei vaja maiustusi, vaid armastust* 'A child does not need sweets but love' In that case the negative verb is obligatory.

Negative pronouns and adverbs (*mitte keegi* 'nobody', *mitte miski* 'nothing', *mitte mingisugune* 'no kind of', *mitte kuskil* 'nowhere', *mitte üldse* 'not at all' etc.) can occur in the negated constituent. In full sentences the particle *mitte* is optional, e.g. *Ta ei käi (mitte) kuskil* 'He doesn't go anywhere',

*Mind ei häiri (mitte) miski* ‘Nothing can disturb me’, *Sa ei armasta mind (mitte) üldse* ‘You don’t love me at all’. The verb is in the negative form. The adverb with the most general meaning (*üldse* ‘at all’, *sugugi* ‘at all’ etc.) can be omitted in some contexts. As a result, the particle *mitte* is used as an element that reinforces negation, e.g. *Ma kohe mitte üldse ei taha seda lubada* – *Ma kohe mitte ei tahaks seda lubada* ‘I wouldn’t like to allow it at all’. In laconic responses the particle *ei* is used in parallel to *mitte*, e.g. *Keda sa nägid?* ‘Who did you see?’ – *Mitte ~ ei kedagi!* ‘Nobody!’ (but not: \**Ma ei näinud ei kedagi*), and the use of the negational particle is obligatory.

The particle *ega* can open a negative emphatic counterargument or a response to a question or command, e.g. *Ega siis tema seda teinud (p)ole!* ‘He didn’t do it, actually!’, *Ega ma rumal (ei) ole!* ‘I’m not stupid after all!’ In that case the verb is in the negative form, but the negational word can be omitted before the verb. The verb tends to be positioned at the end of the clause.

Coordinated constituents are negated by repeating *ei* before each coordinated constituent (in the case of an open list), e.g. *Ta ei söö ei liha, ei kala, ei puuvilja* ‘He doesn’t eat meat, fish, or fruit’, or by means of *ei* together with the negative conjunction *ega* (< *ei* + *ka* ‘also’) before the last constituent (in the case of a closed list), e.g. *Seal polnud enam ei loomi ega linde* ‘There were neither beasts nor birds left’. In the case of coordinated clauses *ei* can be positioned either before the verb or the clause, e.g. *Ta ei joo ega suitseta. Ei ta joo ega suitseta* ‘He neither drinks nor smokes’. *Ega* can be positioned before the last clause even if the preceding coordinate clause is affirmative, e.g. *See, mis oli, on möödas ega (= ja ei) tule enam kunagi tagasi* ‘What used to be is over and will never be back again’.

## 5.6. Phrase

### 5.6.1. Noun phrase

In prototypical NPs, that is, in non-nominalizations, the position of the modifier is fixed in relation to its head. Most modifiers occur in the pre-noun position: (a) demonstratives, e.g. *see mees* ‘this man’; (b) adjectives, e.g. *vana mees* ‘old man’; (c) quantifiers, e.g. *kaks meest* ‘two men’, *kahele mehele* ‘to two men’; (d) participles and *ja*-agent nouns as relative clauses, e.g. *jalutav mees* ‘walking man’, *mõtleva inimene* ‘thinking man’, (e) genitives, e.g. *venna raamat* ‘brother’s book’, *eesti keel* ‘Estonian language’; (f) some oblique-case substantive modifiers, e.g. *puust maja* ‘wooden house’, *nokaga müts* ‘beaked cap’. The listed modifiers can occur also in the postposition, but in that case they are highlighted, which is more characteris-

tic of fictional prose and emotional speech, e.g. *Meri, suur ja sügav, ei anna oma saladusi välja* 'The sea, large and deep, does not disclose a secret', *Ema kallis, tule siia* 'Mum, dear, please come over here'

Demonstratives, adjectives (including ordinals), present participles and *ja*-agent nouns agree with their heads in case and number. In the terminative, essive, abessive, and comitative the modifier agrees only in number and remains in the genitive.

	Singular	Plural
Nominative	<i>suur mees</i> 'great man'	<i>suured mehed</i> 'great men'
Genitive	<i>suure mehe</i>	<i>suurte meeste</i>
Partitive	<i>suurt meest</i>	<i>suuri mehi</i>
Illative	<i>suuresse mehesse</i>	<i>suurtesse meestesse</i>
Inessive	<i>suures mehes</i>	<i>suurtes meestes</i>
Elative	<i>suurest mehest</i>	<i>suurtest meestest</i>
Allative	<i>suurele mehele</i>	<i>suurtele meestele</i>
Adessive	<i>suurel mehel</i>	<i>suurtel meestel</i>
Ablative	<i>suurelt mehelt</i>	<i>suurtelt meestelt</i>
Translative	<i>suureks meheks</i>	<i>suurteks meesteks</i>
Terminative	<i>suure meheni</i>	<i>suurte meesteni</i>
Essive	<i>suure mehena</i>	<i>suurte meestena</i>
Abessive	<i>suure meheta</i>	<i>suurte meesteta</i>
Comitative	<i>suure mehega</i>	<i>suurte meestega</i>

The following forms do not agree with their heads: (a) past participles, e.g. *väsinud ja vaevatud mehele* 'to a tired and painful man'; (b) the *mata*-form, e.g. *söömata toitudest* 'of uneaten dishes'; (c) possessively used pronoun *oma* in an unstressed form, e.g. *Kinkisin oma vennale raamatu* 'I gave my brother a book' (cf. the stressed form: *Otsustasin nii omast tarkusest* 'I decided so by my own wit'), and (d) some indeclinable adjectives, such as *eri* 'different', *valmis* 'ready', and *-võitu* '-ish', *-ohtu* '-ish' ending adjectives etc., e.g. *eri asjadest* 'from different things', *valmis töödele* 'to finished works', *poisiohtu müüjatelt* 'from boyish salesclerks'

There are two kinds of QUANTIFIERS. Most nominal quantifiers (numerals starting with two, the pro-numeral *paar* 'pair' and quantity nouns, such as *hulk* 'quantity', *meeter* 'metre', etc.) are in the singular. In the nominative they require the partitive head noun and agree in case only in oblique cases. Due to this circumstance most Estonian grammars treat not the noun but the quantifier as the head. In the case of cardinal numerals and pro-numerals the noun is in singular; in the case of other quantifiers count nouns take in plural but mass nouns are in the singular, e.g.

N	<i>kaks/mitu meest</i> 'two/several men'	<i>enamik mehi</i> 'most men'	<i>enamik vett</i> 'most of the water'
G	<i>kahe/mitme mehe</i>	<i>enamiku meeste</i>	<i>enamiku vee</i>
P	<i>kaht/mitut meest</i>	<i>enamikku mehi</i>	<i>enamikku vett</i>
Ill	<i>kahesse/mitmesse</i> <i>mehesse</i>	<i>enamikusse meestesse</i>	<i>enamikusse veesse</i>

Some quantifiers that require the partitive are indeclinable (adverbs), e.g. *rohkesti* (*vett, inimesi*) 'plenty of (water, people)', *vähe* 'little', *pisut* 'a little', *küllalt* 'enough', etc.

The other set of quantifiers, such as the numeral or pronoun *üks* 'one; a/an' and the pronouns *iga* 'each', *mõni* 'some', *kõik* 'all', *kumbki* 'each', *mõlema(d)* 'both', *emb-kumb* 'one or the other', *ükski* 'not a single', *terve* 'the whole', etc. behave like adjective modifiers and agree with the noun both in number and in all the cases. The pronoun *mõlema(d)* 'both' lacks the NSg form.

	Sg	Sg	Pl
N	<i>üks/iga mees</i> 'one/each man'	<i>mõni mees</i> 'some man'	<i>mõned mehed</i> 'some men'
G	<i>ühe/iga mehe</i>	<i>mõne mehe</i>	<i>mõnede meeste</i>
P	<i>ühte/iga meest</i>	<i>mõnd(a) meest</i>	<i>mõnesid mehi</i>
Ill	<i>ühte/igasse mehesse</i>	<i>mõnesse/mõnda mehesse</i>	<i>mõnedesse meestesse</i>
	Sg	Pl	
N	–	<i>mõlemad mehed</i>	
G	<i>mõlema mehe</i>	<i>mõlemate meeste</i>	
P	<i>mõlemat meest</i>	<i>mõlemaid mehi</i>	
Ill	<i>mõlemasse mehesse</i>	<i>mõlematesse/mõlemaisse meestesse</i>	

Some quantifiers with the nominative head noun are indeclinable, e.g. *kogu* 'entire', e.g. *kogu seltskond* 'entire company' – *kogu seltskonnast* 'from the entire company'

The quantifiers of the first type can under certain circumstances occur also in the plural and agree with the noun both in number and in all the cases: numerals in the case of *plurale tantum* head, e.g. *kahed saapad* 'two pairs of boots', the quantifiers *mitu* 'several', *palju* 'many', *osa* 'part' etc. if the demonstrative but not the quantifying function predominates, e.g. *mitmed/paljud mehed* 'several/many men'

The elative can be used instead of the partitive if belonging to a definite quantity is expressed, e.g. *kaks meestest* 'two of the men'

GENITIVE PRE-NOUN MODIFIERS include possessive genitive modifiers (*genitivus possessivus*), e.g. *venna raamat* 'brother's book', and genitive modifi-

ers that express species (*genitivus definitivus*), e.g. *eesti keel* 'Estonian language'

OBLIQUE-CASE PRE-NOUN MODIFIERS that express a property may occur in: (a) the partitive, e.g. *head tõugu lehm* 'a cow of a good breed', *tumedat värvi silmad* 'eyes of a dark colour', *keskmist kasvu mees* 'a man of medium height'; (b) inessive, e.g. *paanikas inimene* 'panicky person', *tiisikuses mees* 'a man having tuberculosis', *abielus naine* 'married wife'; (c) elative, e.g. *rauast uks* 'iron door', *lambanahast kasukas* 'sheepskin coat'; (d) adessive, e.g. *naerul suu* 'smiling mouth', *hüppel loom* 'animal in the middle of a jump'; (e) terminative, e.g. *laeni kuusk* 'a spruce reaching the ceiling', *rinnuni rohi* 'chest-high grass'; (f) abessive, e.g. *lasteta perekond* 'childless family', *nokata müts* 'beakless cap'; (g) comitative, e.g. *nokaga müts* 'beaked cap', *habemega mees* 'bearded man' Estonian does not have relative adjectives. The genitive and oblique-case pre-noun modifiers are used instead of relative adjectives.

POST-NOUN SUBSTANTIVE MODIFIERS take the forms of various kinds of adverbials, e.g. *uks eluruumidesse* 'door to living quarters', *sõit linna* 'drive to town', *vestlus sõpradega* 'conversation with friends', *mure laste pärast* 'worry about children', *tagatis eduks* 'key to success', etc.

In NOMINALIZATIONS the form and the position of the modifier depend on their original function in the clause. In the case of a nominalized verb the subject and the object become genitive pre-noun modifiers, e.g. *Poiss õpib* 'The boy is studying' – *poisi õppimine* 'the boy's studying' (subject genitive modifier), *Parandatakse vigu* 'Mistakes are corrected' – *vigade parandus* 'correction of mistakes' (object genitive modifier). Usually (but always in the *mine*-nominalizations) the adverbial retains its form and can be positioned either before or after the head, e.g. *sõpradega* [Com] *vestlemine* 'conversation with friends', *koolist* [Ela] *tulek* 'coming from school', *sõit Helsingisse* [Ill] 'trip to Helsinki' (though *Helsingi* [G] *sõit* is possible, too). Adverbs of manner and time can become adjectivized in the *mine*-nominalization and as an extension of the *ja*-agent noun or remain as adverbs, e.g. *kiire jooksmine* 'fast running' ~ *kiiresti* [Adv] *jooksmine*, *varane tõusmine* ~ *vara* [Adv] *tõusmine* 'early rising', *kiire jooksjä* ~ *kiiresti* [Adv] *jooksja* 'fast runner', *varane tõusja* ~ *vara* [Adv] *tõusja* 'early riser' In other nominalizations, however, they are turned into adjectives, e.g. *kiire jook* 'quick run'

APPOSITION is located either in the post- or prenominal position. Post-nominal apposition can: (a) agree with its head noun in case and number, e.g. *isa* [N], *Pärnust pärit mees* [N] 'father, a man from Pärnu' – *isale* [All], *Pärnust pärit mehele* [All] 'to father, a man from Pärnu'; or occur in the marked form: (b) in the partitive, e.g. *Peeter ja Jüri, meie parimaid jalg-*

*pallureid* [PPl] ‘Peeter and Jüri, some of our best footballers’; (c) occur with the conjunction *kui* ‘as’, e.g. *Ants kui meie parim jalgpallur* ‘Ants as our best footballer’; (d) in the essive, e.g. *Ants meie parima jalgpallurina* [Ess] ‘Ants as our best footballer’ The pre-posed apposition (a) usually agrees with its head; in a special case it occurs uninflected in the nominative, e.g. *minu sõbrale* [All] *Jaanile* [All] ‘to my friend Jaan’ but *sõber* [N] *Jaanile* [All] ‘to the friend Jaan’; or is in the marked form: (b) in the genitive, e.g. *Narva* [G] *linn* ‘town of Narva’, *Juhani-onu* ‘uncle Juhan’; (c) in the elative, e.g. *kunstnikust* [Ela] *sõber* ‘artist friend’ The pre-posed common noun apposition stands in the nominative if it is in the singular, without extensions, and not highlighted, e.g. *Paku härä* [N] *Tammele* [All] *istet* ‘Please offer a seat to Mr Tamm’, *Saatsin doktor* [N] *Saarniidule* [All] *kirja* ‘I sent a letter to Dr Saarniit’, *Viisime tiigripoeg* [N] *Doni* [G] *loomaaeda* ‘We took the tiger cub Don to the zoo’ In appositional constructions, where one of the components is some other name that is not a creature or a place name, and also titles, only one component of the construction is inflected – whether only the generic term, e.g. *sõiduautost* [Ela] *Ford Fiesta* ‘from the passenger car Ford Fiesta’, *romaani* [G] “*Tõde ja õigus*” *autor* ‘the author of the novel “Truth and Justice”’, or one of the two – either the generic term or the name, e.g. *kinost* [Ela] *Kosmos* [N] = *kino* [N] *Kosmosest* [Ela] ‘from the cinema Kosmos’ The pattern with the genitival pre-posed apposition is used in parallel to the latter patterns, e.g. *Fordi sõiduauto* ‘the passenger car Ford’, *Kosmose kino* ‘the cinema Kosmos’ Due to the influence of the patterns of other languages the genitive pattern has started to be replaced by the pre-posed nominative pattern, e.g. *Ford sõiduauto* ‘the Ford passenger car’

### 5.6.2. Adjective and adverb phrases

The modifiers of the adjectives and the degree and manner modifiers of adverbs are positioned before the adjective or adverb, e.g. *eriti ilus* ‘especially beautiful’, *väga kiiresti* ‘very fast’, *liiga pikk* ‘too long’, *imelikult kõver (puu)* ‘oddly crooked (tree)’ The position of the complements and the adverbial modifiers other than degree and manner are non-fixed, e.g. *Ta on oma üleolekus kindel* – *Ta on kindel oma üleolekus* ‘He is sure about his superiority’, *Ema on poja pärast ärevil* – *Ema on ärevil poja pärast* ‘The mother is anxious about her son’ Only when the adjective or adverb itself serves as a pre-modifier of NP, it cannot take post-modifiers, e.g. *emale kingituse eest tänulik poiss* ‘the boy (who is) thankful to (her) mother for the present’ – \**tänulik kingituse eest emale poiss*; *poja pärast ärevil ema* – \**ärevil poja pärast ema*.

In phrases with the comparative adjective resp. adverb, the standard of comparison is marked by the conjunction *kui* 'than' or by the elative case. The conjunctive standard of comparison is positioned in the post-head position; the position of the elative standard of comparison is non-fixed, e.g. *Ants on pikem kui Mart* [N] – *Ants on Mardist* [Ela] *pikem* / *pikem Mardist* [Ela] 'Ants is taller than Mart', *Ants käitub viisakamalt kui Mart* – *Ants käitub Mardist viisakamalt* / *viisakamalt Mardist* 'Ants behaves more politely than Mart' In post-posed equality constructions the standard of comparison is expressed by the conjunctions *kui* 'than' or *nagu* 'as'; in that case equality is indicated by the equative demonstrative (*nii*)*sama* 'as', e.g. *Ants on (nii)sama tark kui/nagu Mart* 'Ants is as wise as Mart' In the case of measure adjectives, the (*u*)*ne*-suffixed equative can be used in addition to the analytic equative. In that case the standard of comparison of the demonstrative equative is in the genitive and is positioned in the pre-head position, e.g. *Ants on Mardi* [G] *pikkune* 'Ants is of the same height as Mart' In the case of the symmetric equative (i.e. the adjective resp. adverb has the equalizing prefix *ühe*- 'same, one'), however, it stands in the comitative, in which case its position is not-fixed, e.g. *Ants on Mardiga* [Com] *ühepikkune* – *Ants on ühepikkune Mardiga* 'Ants is of the same height as Mart' The comitative construction is equal to the coordinate construction, e.g. *Ants ja Mart on ühepikkused* 'Ants and Mart are of the same height'

### 5.6.3. P-phrases

P-phrases perform the same function in sentences as the case forms of the noun. Actually, in some cases a p-phrase can be replaced by a case form of the noun, e.g. *laua pealt* = *laualt* 'from the table', though usually it is difficult to find a one-word substitute. There is a smooth boundary between p-phrases and the case forms of the noun. The terminative, essive, abessive, and comitative share some syntactic properties of the postposition – the adjective modifier does not agree with the head in these cases but remains in the genitive: *suure(\*ni) lauani* 'as far as the big table', and there is no need to repeat the case endings in the coordinated phrases, e.g. *naise(ga) ja mehega* 'with a man and a woman' In Estonian there are both prepositional and postpositional phrases, but the postpositional phrase is more common. The majority of postpositions take the genitive case of the noun, e.g. *laua peale* 'on to the table', *aia ääres* 'next to the fence', *jõulude ajal* 'at Christmas', *õnnetuse tõttu* 'because of the accident', *tuleviku jaoks* 'for the sake of future', *käte abil* 'with the help of hands' Some postpositions take other cases: (a) the elative, e.g. *põlvist saadik* 'up to one's knees', *hommikust peale* 'since

morning'; (b) the nominative, e.g. *päev otsa/läbi* 'throughout the day'; (c) the nominative or the partitive, e.g. *aasta/aastaid tagasi* 'a year / many years ago'. Prepositions usually take the partitive, e.g. *keset tänavat* 'in the middle of the street', *vastu lauda* 'against the table', *pärast tööd* 'after work'. Other cases occur more rarely: (a) the genitive, e.g. *läbi põõsaste* 'through the bushes', *üle kümne kilogrammi* 'over ten kilograms'; (b) the allative, e.g. *tänu sõpradele* 'thanks to one's friends'; (c) the terminative, e.g. *kuni hommikuni/metsani* 'until morning / as far as the forest'; (d) the comitative, e.g. *koos/ühes sõbraga* 'together with one's friend'; (e) the abessive, e.g. *ilma sõbrata* 'without one's friend'. Some p-positions can occur either as a preposition or a postposition in the same meaning or with a different meaning. They may take the same cases or different cases, e.g. *ümber maja* = *maja ümber* 'round the house', *mööda teed* = *teed mööda* 'along the road', *vastu lauda* – *laua vastu* 'against the table', *peale surma* 'after one's death' – *peale selle raamatu* 'in addition to this book' – *laua peale* 'onto the table' – *hommikust peale* 'since morning'. Some p-positions are optional – the prepositions *kuni* 'until', *koos* 'together', and *ilma* 'without' are always optional, e.g. *kuni kivini* = *kivini* 'as far as the stone', *koos sõbraga* = *sõbraga* 'together with the friend', *ilma mütsita* = *mütsita* 'without a hat'; others are optional only in certain meanings, e.g. *Sellest hetkest (peale) said meist vaenlased* 'Since that moment onwards we became enemies'. Most p-positions coincide with adverbs, e.g. *maja ümber* 'round the house' – *ümber tegema* 'redo', *peale tööd* 'after work' – *peale hakkama* 'get started'.

## 5.7. Clause combinations

### 5.7.1. Complement clauses

Complement clauses (i.e. clauses that function as an argument of a predicate) in Estonian include (a) finite clauses, e.g. *Ma tean, et ta lahkub* 'I know that he is going to leave'; (b) non-finite clauses: participial clauses, e.g. *Ma arvasin Juhani lahkuvat* 'I thought Juhan might leave'; infinitive clauses, e.g. *Ta tahtis lahkuda* 'He wanted to leave' or nominalizations, e.g. *Tema lahkumine tekitas segadust* 'His departure caused confusion'.

In the case of FINITE COMPLEMENTS the dependency of the complement is signalled by the conjunction at the beginning of the complement clause. The basic complementing conjunction is *et* 'that', e.g. *Räägitakse, et tal on poeg* 'He is said to have a son'. In the case of the object clause it may be omitted, e.g. *Ma tean, et ta lahkub* = *Ma tean, ta lahkub* 'I know that he will leave'. Other conjunctions that occur in declarative complement clauses include comparative conjunctions *nagu* 'as', *kui* 'as' etc., which can be used where the

speaker wants to explicitly distance himself from the truth value of the complement clause, as in *Mulle näis, nagu poleks ta ära olnudki* 'It seemed to me as if he hadn't been away at all'. In indirect questions one can use the question word *kas* 'if, whether' (in yes-no questions), e.g. *Ma ei tea, kas ta tuleb* 'I don't know if he will come', or interrogative-relative pronouns and pro-adverbs: *kes* 'who', *mis* 'which', *miks* 'why', *kus* 'where' etc. (in WH questions). The question word *kas* may be replaced by subject-verb inversion, e.g. *Ma ei tea, kas ta [S] räägib [V] tõtt või ei = räägib [V] ta [S] tõtt või ei* 'I don't know whether he's telling the truth or not'.

The finite complement clause may be preceded by a correlative, which is usually a demonstrative pronoun *see*, e.g. *(See,) et sa tulid, on väga tore* 'It's very nice that you came', *Ma kuulsin seda, et Juhan on haige, Mardi käest* 'I heard from Mart that Juhan is ill'. The use of the correlative is usually optional, even in the case of extraposition, as in *(See) on väga tore, et sa tulid* 'It's very nice that you came'. The extraposition of the complement clauses is not obligatory.

Word order in the complement clause does not differ from the word order in the main clause.

In indirect speech the verb of the declarative complement clause is in the indicative or quotative mood, e.g. *Jüri ütles, et Mart sõidab = sõitvat [Quo] maale* 'Jüri said that Mart would go to the country'. In indirect commands the verb of the complement clause is in the conditional or the jussive if the matrix verb is a verb of saying, e.g. *Jüri ütles, et me lepiksime [Cnd] = leppigu [Jus] omavahel kokku* 'Jüri said that we should come to an agreement between ourselves'. The construction with the modal verb *pidama* 'must, have to' is also frequent; in the case of prohibition the construction with the modal verb *tohtima* 'be not allowed' is used, e.g. *Jüri ütles, et me peame/peaksime [Cnd] omavahel kokku leppima* 'Jüri said that we should come to an agreement between ourselves', *Jüri ütles, et me ei tohi/tohiks [Cnd] riielda* 'Jüri said that we shouldn't quarrel'. Where the matrix verb itself expresses command, the infinitive complement is used, e.g. *Jüri käskis meid omavahel kokku leppida [Inf]* 'Jüri told us to come to an agreement between ourselves'.

In speech it is rather common to use an intermediate form between direct speech and indirect speech. In that case the complementing conjunction *et* 'that' is attached to the complement clause without changing the lexical structure and deictic relations, e.g. *Ta küsis, et kas Jaan on haige* 'He asked if Jaan was ill', *Ta põrutas mulle, et ära sa õienda siin midagi* 'He blurted to me that I shouldn't straighten things out here'.

In Estonian, reported speech is expressed in the tense in which the statement was originally made, i.e. Estonian lacks concord of tenses, e.g. *Jüri ütles: "Mari sõidab [Pr] maale"* 'Jüri said, "Mari will go to the country"' –

*Jüri ütles, et Mari sõidab* [Pr] *maale* lit. 'Jüri said that Mari will go to the country'

NON-FINITE COMPLEMENTS. After transitive verbs of saying, thought, feeling, and perception (*ütleva* 'say', *arvama* 'think', *mäletama* 'remember', *nägema* 'see' etc.) the finite object clause may be replaced by the *vat*-participle construction (the *vat*-form being the partitive form of the present participle). At this, the subject of the subordinate clause is raised to the matrix object position, e.g. *Ma arvasin, et sina magad* = *Ma arvasin sind magavat* 'I thought you to be sleeping' The *vat*-complement can replace also the finite subject clauses that extend the intransitive perception verbs *näima*, *tunduma*, *paistma* 'seem' The subject of the subordinate clause is raised to the matrix subject position, e.g. *Tundus, et sa magad* = *Sa tundusid magavat* 'It seemed that you were sleeping'

The *da*-infinitive construction can occur as a complement of the predicates expressing intention or desire, dynamic or deontic necessity, emotion and evaluation. Its notional subject is co-referential to the most salient argument of the matrix (usually the experiencer), and therefore it is equi-deleted, e.g. *Ma soovin koju minna* 'I want to go home', *Mul on vaja koju minna* 'I need to go home', *Mulle meeldib koju minna* 'I like to go home', *Mul on raske koju minna* 'It is hard for me to go home' The *da*-infinitive can also extend the predicates that express command, permission, enabling or impeding. Its notional subject is co-referential to the matrix (direct or dative) object, e.g. *Ema käskis teda/tal lilli korjata* 'Mother told him to pick some flowers'

In nominalized complements the underlying subject or the object stands in genitival relationship to the nominalized predicate, e.g. the subject modifier: *Poisi lahkumine tekitas segadust* 'The boy's departure caused confusion'; the object modifier: *Ma nägin poisi lahkumist* 'I saw the boy's departure' (cf. 5.6.1). The subject and the object modifier cannot occur together in the same NP, unless the object modifier has a generic meaning and occurs as the first component of the compound, as in *Nägin tema majaehitamist* 'I saw his building of the house' Upon the nominalization of a transitive clause the double genitive is avoided by presenting the underlying subject (agent) as an adpositional phrase NPg + *poolt* 'by' (as in passive clauses), e.g. *linna vallutamine vaenlase poolt* 'the taking of the town by the enemy'

### 5.7.2. Adverbial clauses

Adverbial clauses are normally finite clauses, but some adverbials may be also non-finite clauses. In the case of FINITE CLAUSES the adverbial function is usually marked by the form of the correlative word or phrase, which is lo-

cated either in the main clause or in the subordinate clause. The most usual subordinating elements are the non-marked subordinating conjunction *et* ‘that’ (in clauses of cause, result, purpose, concession, and (resultative) manner / degree) and *kui* ‘when, if, than, as’ (in clauses of time, condition, and (comparative) manner / degree). The correlative in the main clause is focused. However, the correlative in the subordinate clause forms compound conjunctions with the conjunctions *et* and *kui*, cf. *Ma hilinesin sellepärast* [for this reason], *et auto läks katki* – *Ma hilinesin, sellepärast et auto läks katki* ‘I was late because the car broke down’ The compound conjunctions have given rise to several one-word conjunctions, e.g. *nii kui* > *nagu* ‘like’, *selle asemel et* > *selmet* ‘instead of’ (an artificial coinage by J. Aavik). Locative clauses are close to relative clauses by being related to main clauses by means of relative pro-adverbs.

Locative	<i>Ta tuli tagasi siia</i> [here], <i>kust</i> [from where] <i>ta oli kunagi lahkunud</i> ‘He returned to the place that he had once left’
Time	<i>Ta tuli siis</i> [then], <i>kui</i> [when] <i>ma magasin</i> ‘He came while I was asleep’ <i>Ta tuli enne seda</i> [before that], <i>kui</i> [when] <i>ma magama jäin</i> ‘He came before I fell asleep’
Manner	(a) resultative: <i>Ta seisis nii</i> [so], <i>et</i> [that] <i>ta nägu ma ei näinud</i> ‘He was standing so that I was unable to see his face’ (b) comparative: <i>Ta ei seisnud nii</i> [so], <i>nagu</i> [as] <i>ma tahtsin</i> ‘He wasn’t standing in the way as I wanted him (to stand)’
Degree	(a) resultative: <i>Olin temaga nii harjunud, et ei kujutanud ette elu ilma temata</i> ‘I was so accustomed to her that I couldn’t imagine life without her’ (b) comparative: <i>Ta pole nii halb, kui sa arvad</i> ‘He’s not as bad as you think’ <i>Aega kulus rohkem</i> [more], <i>kui</i> [than] <i>esialgu oli plaanitud</i> ‘It took more time than had been originally planned’
Purpose	<i>Ta õpib selleks</i> [for this], <i>et targemaks saada</i> ‘He studies in order to become wiser’
Cause	<i>Temale hoiduti mõtlemast sellepärast</i> [for this reason], <i>et see oli liiga valus</i> ‘They avoided thinking of him because it was too painful’ <i>Kuna</i> [as] / <i>et</i> [that] <i>keegi ei tulnud, siis</i> [then] <i>lahkusime meiegi</i> ‘Because no one came, we left too’
Condition	<i>Kui</i> [if] <i>ta sind märkab, (siis)</i> [then] <i>oled tehtud mees</i> ‘If he notices you, you’ll be famous’
Result	<i>Ma oleks kukkunud ilma sinu toetuseta, nii et</i> [so that] <i>olen sulle tänulik</i> ‘I would have fallen down without your help, thus I’m grateful to you’

Concession *Vaatamata sellele* [despite this], *et aeg oli hiline, ei tahtnud keegi lahkuda*  
 ‘Despite the fact that time was late, no one wanted to leave’  
*Ta istus pimedas, kuigi* [although] *oleks võinud tule süüdata*  
 ‘He was sitting in the dark although he might have switched on the light’

Conditional clauses sometimes lack the conjunction *kui*. In this case the clause has inverted (V1) word order, e.g. *Oleks ta noorem, hakkaks ta maja ehitama* ‘Were he younger, he would start to build a house’ Conditional clauses without *kui* usually precede their superordinate clauses. In real conditionals the verb is in the indicative mood or in the *da*-infinitive, e.g. *Isegi kui võtame* [Ind] *auto = võtta* [Inf] *auto, ei jõua me õigeaks ajaks* ‘Even if we hired a car, we wouldn’t make it in time’ In unreal conditionals the conditional mood is used, e.g. *Kui ta seda teeks* [Cnd], *läheks tal halvasti* ‘If he did it, he would get into trouble’ In adverbial clauses of purpose, too, the finite verb is often substituted by the *da*-infinitive if the notional subject of the purpose clause is the same as in the main clause, e.g. *Ta on liiga tark selleks, et ta annaks* [Cnd] *ahvatlustele järele = et ahvatlusele järele anda* [Inf] ‘He’s too clever to give in to the temptation’

Time, manner, purpose, and functionally vague secondary events can also be expressed by NON-FINITE CLAUSES: the gerundial (converb), the absolute nominative, infinitive and supine constructions and nominalizations. Present and past gerunds with their extensions form GERUNDIAL CONSTRUCTIONS, e.g. *Õhtul toas istudes mõtles ta sellele kaua* ‘In the evening when sitting in the room he thought long about it’, *(Olles) kõik südamele ära öelnud, hakkas tal kergem* ‘Having opened his heart (to him) she felt better’, *(Olles) ükski koju jäetud, oli ta algul nukker* ‘Having left home all alone she was sad at first’ The past gerunds are analytic tense forms that consist of the gerund of the *olema*-verb and the past participle active (*nud*-participle) or past participle passive (*tud*-participle), e.g. *olles teinud* ‘having done’, *olles tehtud* ‘having being done’ Usually the *olema*-verb is omitted, therefore the past participle alone acts as the gerund. The negative counterparts of gerundial constructions are formed by the gerund, the head of which is the abessive form of the supine (*mata*-form), e.g. *Kaugemale tulevikule mõtlemata ta nõustus* ‘He agreed without thinking about a more distant future’ Gerundial constructions in Estonian may be related or non-related to the main clause with regard to the subject. The underlying subject of the related gerundial construction is co-referential to an argument of the main clause and is therefore equi-deleted, e.g. *Õhtul toas istudes mõtles Jaan sellele kaua* ‘When sitting in his room in the evening Jaan thought about it for a long time’ This argument of the main clause is usually a subject, but control by a non-subject is also possible if the non-subject is more agentive than the subject, as in *Telegrammi*

*lugedes läksid Peetri jalad nõrgaks* 'When reading the telegram, Peeter's legs went weak', *Raamatut läbi lugematagi oli mul selge ettekujutus, millega asi lõpeb* 'Without reading the book I had a clear understanding how the matter would end' In the non-related gerundial construction the subject is marked by the genitive, e.g. *Päikese loojudes läks ilm jahedaks* 'The sun setting it became cooler' In Estonian, the non-related gerundial construction cannot take a direct object. Non-related constructions are possible only with intransitive verbs and some transitive verbs of perception when used without an object (*nägema* 'see', *kuulma* 'hear', *arvama* 'think', *teadma* 'know'), e.g. *Koer jäi minu nähes auto alla* 'I witnessed a dog being run over by a car' Gerundial constructions are usually either time or manner clauses or functionally vague adverbial clauses. The *des*- and *mata*-constructions usually express an event that is simultaneous with the event expressed by the main clause, e.g. *Sõbralikult naeratades ütleb ta järgmised sõnad* 'While smiling in a friendly way he says the following words', *Ta tormas kodu poole, midagi enda ümber nägemata ja kuulmata* 'He rushed home seeing and hearing nothing around him' The *nud*- and *tud*-constructions, however, express a preceding event, e.g. *(Olles) kooli lõpetanud, sõitis Olga Londonisse* 'Having finished school, Olga travelled to London', *(Olles) vaenlase poolt tagasi löödud, asusid meie väed kaitsele* 'Having been repelled by the enemy, our troops took up a defensive position' Sometimes the *des*-form can also point to an immediately preceding event, e.g. *Jõudes = jõudnud mõtetega nii kaugele, tundis ta piinlikkust* 'Having reached that far in his thoughts he felt embarrassed' or following event, e.g. *Kord laupäeva-õhtul koju tulles = tulnud, ütles ta, et peab homme ka päevasele etendusele minema* 'Having once arrived home on a Saturday evening he said that he would have to go to the matinee the next day' The ABSOLUTE NOMINATIVE is a reduced clause consisting of two components, one of which is a subject-like NP in the nominative and the other is some other non-verbal component. This type of clauses of time and manner is rather widespread, e.g. *Koer lesis, pea käppadel* 'The dog was lying with its head on the paws' The *da*-INFINITIVE and the SUPINE forms are used to express purpose. The underlying object of the final *da*-infinitive is co-referential with the (subject or object) argument of the (intransitive or transitive) main clause, e.g. *See töö jääb sinu teha* 'This job will be your responsibility', *Ta andis mulle raamatu lugeda* 'He gave me a book to be read' In the case of the supine it is the underlying subject that is co-referential with the subject or the object of the main clause. As final adverbs the following forms of the supine are used: (a) the illative: *Ta läks koju sööma* 'He went home to have a meal'; (b) the inessive: *Ta käis kodus söömas* 'He went home to have a meal'; (c) the elative: *Ta tuli kodust söömast* 'He came from home having had a meal'; (d) the translative: *Ta*

*tahtis püsti tõusta, rõhutamaks sellega, et ta lahkub* ‘He wanted to stand up in order to make it clear that he would leave’ The *da*-infinitive and the supine in the illative, the inessive, and the elative are related to certain semantic classes of the predicate. The supine in the translative (the form was invented by J. Aavik at the beginning of the 20<sup>th</sup> century) is the form of the free adverbial of purpose. NOMINALIZATIONS are used mainly to express time: *Ma ootan tema saabumiseni* ‘I’ll wait until his arrival’, *Päikese loojumisel / enne päikese loojumist pilved punetasid* ‘At the time of the sunset / before the sunset the clouds turned red’, or purpose (under the same conditions as the *da*-infinitive): *Ta tõi mulle lugemiseks (= lugeda) paar raamatut* ‘He brought me a couple of books to read’

### 5.7.3. Relative clauses

The relative clause (i.e. a clause that functions as a nominal modifier) can be in Estonian (a) a finite clause, e.g. *laps, kes nutab* ‘the child who is crying’, or (b) a non-finite (participial) clause, e.g. *nuttev laps* ‘the crying child’

FINITE RELATIVE CLAUSES are postnominal, that is, the clause occurs after the head. NPs are relativized by using the relative pronoun strategy. The relative pronoun (or pro-adverb) is positioned at the beginning of the clause and is obligatory. If the head of the relative clause is a personal pronoun and the relativized NP is a pronominal subject of the relative clause, the subject pronoun may be optionally retained in the clause in short form, e.g. *mina, kes ma siin elan* ‘I who I here live [1Sg]’, *sina, kes sa siin elad* ‘you who you here live [2Sg]’ It is possible to relativize the NP in any grammatical relation, e.g. the subject: *mees, kes juhib autot* ‘the man who is driving the car’; the object: *mees, keda ma kohtasin* ‘the man whom I met’; the oblique object: *mees, kellega ma rääkisin* ‘the man who I spoke to’; the possessor: *mees, kelle autoga ma sõitsin* ‘the man whose car I was driving’ The common relative pronouns include pro-substantives *kes* ‘who’ and *mis* ‘that, which’ In some cases the pro-adjectives *milline* ‘which’ and *missugune* ‘which’ are used, e.g. *niisugune auto, millise sa ostsid* ‘the kind of the car that you bought’, or pro-adverbs *kus* ‘where’, *mil(lal)* ‘when’, etc., e.g. *maja, kus ma elan* ‘the house where I live’ The relative pronoun *kes* ‘who’ is used with individual human referents, e.g. *mees, kes* ‘the man who’, the pronoun *mis* ‘that’ is used with inanimates, e.g. *auto, mis* ‘the car that’ In the case of animals and collectives it is often possible to use one or the other pronoun, e.g. *sääsk, kelle/mille sa tapsid* ‘the gnat that you killed’, *brigaad, kes/mis töötas ehitusel* ‘the team that worked at the construction site’ In the case of a plural antecedent the pronouns *kes* ‘who’ and *mis* ‘that’ usually occur in

the singular, e.g. *mehed, kellele te maja müüsite* ‘the men to whom you sold the house’ If the head noun is non-specified, one can use the headless relative clause, e.g. *Kes tööd ei tee, ei pea ka sööma* ‘The one who doesn’t work, needn’t eat either’ There is no regular formal distinction between restrictive and non-restrictive relative clauses. Nor does Estonian orthography make a distinction between them – relative clauses of both types are separated by commas from their heads. However, there are still some features that make a distinction between restrictive and non-restrictive clauses. First, in restrictive but not in non-restrictive relative clause it is possible to use the correlatives *see* ‘this, the’ and *selline* ‘such’, cf. *see naine, keda ma armastan* ‘the woman whom I love’ Second, if the correlative is present, it is possible to separate the restrictive relative clause from its head if the head of the relative clause is a modifier of the noun, as in *selles mehe auto, kes meil külas käis* ‘the car of the man who visited us’ Third, pro-adjectives *milline* ‘which’ and *missugune* ‘which’ can occur only in the restrictive relative clause, e.g. *selline liblikas, missugust ma varem näinud polnud* ‘a kind of butterfly that I hadn’t seen before’

PARTICIPIAL RELATIVE CLAUSES are usually prenominal modifiers. The head is not represented in them, that is, they are formed by using the gap strategy. Only subject- and object-NPs can be relativized by means of participle relative clauses. Constructions with any type of participle can occur as relative clauses: (a) the present participle active or *v*-participle, e.g. *magav laps* ‘a sleeping child’; (b) the present participle passive or the *tav*-participle, e.g. *esitlusele kutsutavad külalised* ‘the guests to be invited to the presentation’; (c) the past participle active or the *nud*-participle, e.g. *teel kaduma läinud kaup* ‘the merchandise that was lost on the way’; (d) the past participle passive or the *tud*-participle, e.g. *lauale vedelema jäetud raamatud* ‘the books that had been left lying about on the table’ The participles are used as adjectival modifiers of the NP. Present participles always agree with their head noun in case and number, e.g. NSg *magav laps* ‘sleeping child’, GSg *magava lapse* ‘of the sleeping child’, NPl *magavad lapsed* ‘sleeping children’, etc., past participles agree only if used in the postnominal position, which is not typical of them, e.g. PPl *raamatuid, lauale vedelema jäetuid* ‘some books that had been left lying about on the table’ Similarly to real adjectives, in the case of participles, too, the modifiers precede the participle. However, they retain the form that is characteristic of verb extensions.

## 5.8. Coordination and anaphora

### 5.8.1. Coordination

The basic strategy for coordinating both clauses and other units is linking by conjunctions, e.g. *Päike paistab ja linnud laulavad* 'The sun is shining, and the birds are singing', *väike, aga tubli* 'small but excellent', *poiss või tüdruk* 'a boy or a girl'. However, juxtaposition can be used as well, e.g. *Päike paistab, linnud laulavad* 'The sun is shining; the birds are singing'. The coordinating conjunctions are usually positioned between the constituents.

There are two simple coordinating conjunctions in Estonian with the meaning of addition – *ja* 'and' and *ning* 'and'. *Ning* is used less often and in the case of a multiword coordinated constructions it usually appears later than *ja*: *Ta sõi ja jõi ning läks minema* 'He ate and drank and left'. The variant *Ta sõi ning jõi ja läks minema* is less common. The correlative conjunction of addition, which singles out each of the coordinated phrases, is *nii ... kui (ka)* 'both...and', e.g. *Nii Peeter kui ka Jüri on üliõpilane* 'Both Peeter and Jüri are students'. The disjunctive conjunctions include *või* 'or' and *ehk* 'or'. *Või* is used to alternate clauses in alternative questions, e.g. *Kas sa lähed üksi või ma saadan sind?* 'Will you go alone, or should I escort you?'. It is also used in the case of alternation of phrases, where the same alternative particle *kas* occurs optionally before the first alternative, e.g. *See on (kas) Peeter või Juhan* 'It is either Peeter or Juhan'. *Ehk* is used to disjunct separate names for identical things (synonyms), e.g. *lingvistika ehk keeleteadus* 'linguistics or linguistic science'. Adversative conjunctions include *aga* 'but', *kuid* 'but', and *ent* 'but'. They are synonymous, e.g. *Päev oli päikseline, aga = kuid = ent jahe* 'The day was sunny but cool'. However, *ent* is used less often than *aga* and *kuid*. The conjunction *aga* can be located also after the topic of the second clause, e.g. *Teised lõbutsesid, aga mina = mina aga pidin üksi kodus olema* 'The others were having fun, but I had to stay at home alone'.

The negative conjunction *ega* 'nor' is used to negate the second verb phrase in the case of addition, e.g. *Ta magab, ega (= ja ei) mõtlegi üles tõusta* 'He is asleep and has no intention of getting up'. It is used also in phrasal coordination together with the negation word *ei* 'not' before coordinated phrases, e.g. *Ta ei söö ei liha ega kala* 'He eats neither meat nor fish' (cf. 5.5.4). In the latter case the difference between addition and alternation is neutralized. The connector (*mitte*) ... *vaid* separates the negated phrasal alternative from the affirmative, e.g. *Ta (mitte) ei nuta, vaid naerab* 'He's not crying but laughing', *See ei olnud (mitte) Juhan, vaid Peeter* 'It wasn't Juhan but Peeter'.

Identical elements in coordinated clauses and phrases need not be repeated. It is possible to omit any repeated element of the second clause, for

example, the verb: *Täna otsustan mina, homme (otsustad) sina* ‘Today I’ll make the decisions; you’ll make them tomorrow’; the subject: *Peeter tellis takso ja sõitis sadamasse* ‘Peeter ordered a taxi and rode to the port’; the adverbial: *Ta elab (Tallinnas) ja (ta) töötab Tallinnas* ‘He lives (in Tallinn) and (he) works in Tallinn’, etc., and also the auxiliary verb *olema* ‘be’, e.g. *Nad olid just lahkunud ja (nad olid) asjad kaasa võtnud* ‘They had just left and (they had) taken their things with them’ and the subordinating conjunction, e.g. *Ma ei usu, et ta tagasi tuleb ja (et ta) mind siit ära viib* ‘I don’t think that he will return and (that he) will take me away from here’ In noun phrases the common modifier or the head noun is often left out from the second phrase. The omission of the repeated singular modifier does not make the remaining modifier a plural one, e.g. *väike maja ja väike aed* ‘a little house and a little garden’ → *väike maja ja aed* ‘a little house and garden’ Nor is the omission of the repeated singular head usually accompanied by the plurality of the remaining head, e.g. *Eesti president ja Soome president* ‘the Estonian president and the Finnish president’ → *Eesti ja Soome president* lit. ‘the Estonian and the Finnish president’ The use of the plural is not impossible, though, and shows an upward trend. Also, it is possible to omit the p-positions, e.g. *Ta on vihane nii minu (peale) kui ka sinu peale* ‘He’s angry both at me and you’ and even the postposition-like endings of the terminative, essive, abessive and comitative, e.g. *mehe(ni) ja naiseni* ‘up to the man and the woman’, *mehe(ga) ja naisega* ‘with the man and the woman’

COORDINATION AND ACCOMPANIMENT. Accompaniment can be expressed in Estonian by the comitative ending. It may be reinforced by the p-positions *koos* ‘together’ and *ühes* ‘together’, e.g. *Juhan läks (koos/ühes) sõbraga [Com] kinno* ‘Juhan went to the cinema with his friend’ The same means can also be used to express coordination, as in *Juhan (koos/ühes) sõbraga läks/läksid kinno* lit. ‘Juhan with his friend went to the cinema’ (= *Juhan ja sõber läksid kinno*) ‘Juhan and his friend went to the cinema’ If the first constituent of the construction is a personal pronoun, it usually stands in the plural, e.g. *Meie sõbraga* (= *mina ja sõber*) *läksime kinno* lit. ‘We with the friend (= I and my friend) went to the cinema’

### 5.8.2. Anaphora<sup>1</sup>

CLAUSE-INTERNAL ANAPHORA may be reflexive, possessive, or reciprocal. It is manifested by pronouns that mark identity with the referent of a preceding NP, usually in the subject position. Reflexive anaphora is expressed by the

<sup>1</sup> Anaphora denotes here both forward reference and backward reference.

reflexive pronoun *ise* (genitive *enese* ~ *enda*) 'oneself' in the position of complements, e.g. *Jüri pesi ennast* [P] 'Jüri washed himself', *Jüri ehitas endale* [All] *maja* 'Jüri built a house for himself' The forms of reflexive pronoun *ise* may be replaced with the pronoun *oma* if the referents of the subject and the object stand in the relation of the possessor and the possessee, as in *Jüri ehitas endale* = *omale* [All] *maja* 'Jüri built a house for himself' The possessive anaphora in the position of the noun modifier is manifested by the same reflexive pronouns in the genitive, marking identity with the subject (or another most salient NP), i.e. *Jüri ootas Marit oma* = *enda* [G] *maja ees* 'Jüri was waiting for Mari in front of his house' or (optionally) by the personal pronouns in the case of other controllers, e.g. *Jüri ootas Marit tema* (= *Mari*) *maja ees* 'Jüri was waiting for Mari in front of her house' The emphatically used *oma* may act as the adjective. In that case it agrees with its head noun (pro-adjectival use: *Tean seda omast* [Ela] *käest* [Ela] 'I know it from my own experience'; true adjectival use: *Oleme omad inimesed!* 'Let us be our own people'). The reflexive pronoun *ise* can be used also as the emphatic apposition, e.g. *Sina ise ütlesid seda!* 'You said it yourself' The reciprocal anaphora is expressed by the reciprocal pronouns *teineteise* 'each other' and *üksteise* 'one another' The pronoun *teineteise* 'each other' refers to two referents; *üksteise* 'one another' refers to two or more referents, e.g. *Peeter ja Jüri andsid teineteisele* = *üksteisele* *kätt* 'Peeter and Jüri shook hands with each other', *Peeter, Jüri ja Mihkel aitasid üksteist kõiges* 'Peeter, Jüri, and Mihkel helped one another in everything'

The ANAPHORIC RELATIONS BETWEEN CLAUSES are revealed by various demonstrative, personal, or relative pronouns, e.g. *see* 'this', *too* 'that', *selline* 'such'; *tema* 'he, she', *meie* 'we'; *kes* 'who', *mis* 'that' etc., and by the demonstrative pro-adverbs, e.g. *siin* 'here', *siis* 'then', *nii* 'so' etc. The third person pronoun *tema* ~ *ta* 'he, she', which developed from the demonstrative pronoun, has retained its anaphoric function. It is usually used to refer to animates while the demonstrative pronouns *see* 'this' and *too* 'that' commonly refer to an inanimate antecedent, cf. *Olga on tubli naine. Tema ~ ta on viis last üles kasvatanud* 'Olga is a great woman. She has reared five children', *Lugesin "Kolme musketäri"* *See on hea raamat* 'I read "Three Musketeers" It's a good book' The short form *ta* 'he, she' can also refer to an inanimate antecedent, e.g. *Viski on hea asi, kuid see = ta (\*tema) võtab mõistuse ära* 'Whisky is a good thing, but it takes your senses away' *See* 'this' can in turn refer to some animate referent as well, e.g. *Meile tuleb uus ülemus, kuid see ei tunne meie elu* lit. 'We are going to have a new boss, but, it doesn't know our life' However, it acquires a pejorative connotation if it is highlighted and refers to a person that is known to the listener, e.g. *Mart käis eile siin. – Mida see jälle tahtis?* lit. 'Mart visited us yesterday. What did it

want again?’ In case the preceding sentence points to two referents and both of them are either animate or inanimate, then *ta* refers to the former and *see* to the latter, e.g. *Tüdruk vaatas poisi poole. Ta (= tüdruk) oli kahvatu* ‘The girl was looking in the direction of the boy. She looked pale’, *Tüdruk vaatas poisi poole. See (= poiss) oli kahvatu* ‘The girl was looking in the direction of the boy. He looked pale’ If one of the referents is animate and the other is inanimate, then *ta* refers to the animate referent and *see* to the inanimate one, e.g. *Raamat meeldis tüdrukule. See (= raamat) oli nii lõbus, et ajas teda (= tüdrukut) naerma* ‘The girl liked the book. It was so funny that it made her laugh’ The pronoun *too* ‘that’ is rare in Common Estonian. Its usage largely coincides with the usage of *see*. However, in case they occur together *see* and *too* can denote the referents that are mentioned first and second, respectively, e.g. *Toomas, tema sõber, selle sõbratar ja tolle ema elasid kolm päeva meil* ‘Toomas, his friend, the girlfriend of the latter, and her mother stayed with us for three days’ In South Estonian the use of distal *too* is common.

## Abbreviations

**1Pl** – 1<sup>st</sup> person plural, **1Sg** – 1<sup>st</sup> person singular, **2Pl** – 2<sup>nd</sup> person plural, **2Sg** – 2<sup>nd</sup> person singular, **3Pl** – 3<sup>rd</sup> person plural, **3Sg** – 3<sup>rd</sup> person singular, **A** – adverbial, **Abe** – abessive, **Abl** – ablative, **Ade** – adessive, **Adv** – adverb, **All** – allative, **Cnd** – conditional mood, **Com** – comitative, **Ela** – elative, **Ess** – essive, **G** – genitive, **Ill** – illative, **Imp** – imperative mood, **Ind** – indicative mood, **Ine** – inessive, **Inf** – infinitive, **Ips** – impersonal voice, **iv** – intransitive verb, **Jus** – jussive mood, **N** – noun; nominative, **Neg** – negative, **NP** – noun phrase, **O** – direct object, **Obl** – oblique, **P** – predicative; partitive, **Pl** – plural, **Pr** – present tense, **Q** – question particle, **Quo** – quotative mood, **S** – subject, **Sg** – singular, **Ter** – terminative, **Trl** – translative, **tv** – transitive verb, **V** – verb, **X** – object or adverbial

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## II.

# RISE AND DEVELOPMENT OF THE ESTONIAN LANGUAGE\*

*Tiit-Rein Viitso*

### 1. Introduction: characteristic features of Estonian

There exists a certain set of features that are used to popularly characterize the Estonian language. The most important five features are (1) the presence of three contrastive quantities of vowels and most consonants, (2) 14 case forms both in the singular and the plural, (3) postpositions prevailing instead of prepositions, (4) a specific illabial mid-high central vowel *õ*, (5) no voiced stops and sibilants. For persons who have at least some knowledge of Finnish five more features can be added: (6) final vowel loss after long initial syllables and in long words, (7) vowel syncope in open second syllables if preceded by a long initial syllable, (8) no vowel harmony, (9) loss of the genitive ending *-n*, (10) the conditional mood in *-ks* instead of *-isi* as in Finnish, (11) the presence of a special mood to avoid mentioning the author or the source of information. Only a few foreigners later learn that the first and the most exotic feature is actually a half-truth as it results from the so-called gradation or grade alternation of long stressed syllables. Eleven case forms out of 14 have just the same function as prepositions in English, German, and many other European languages. Anyone who tries to use the distinctive features of Estonian to transform Finnish into Estonian soon finds that these features are more useful for listening than for producing Estonian. And far not all native speakers of Estonian know or remember that there have been and still are native speakers of Estonian who usually manage without features (1), (4), or (7) and ignore or misuse features (6), (8), or (10).

Estonian, in fact, is not only Modern Standard Estonian. Similarly to many other languages, the literary standard has united different related dialects or languages that in other historical conditions could exist as or develop into independent languages.

\* The study was partially supported by grant no. 4643 of the Estonian Science Foundation.

## 2. The linguistic background of the Estonian language

Estonian belongs to the Finnic branch of the Finno-Ugric stock of the Uralic family. The Finnic branch is a dialect continuum that is usually divided into seven or eight languages. In that case, the minimal list contains Livonian, Estonian, Votic, Ingrian, Finnish, Karelian, and Veps. Often the Lude language is extracted from Karelian as the eighth language, and even the extraction of Aunus (or Livvi) as the ninth language can be justified as well. Even nine is not the upper limit of possible Finnic languages. Actually, only Finnish and Estonian as languages represent the speech of populations that have acquired a common literary language. There are groups of speakers outside Finland and inside Estonia who maintain their dialect to be an independent language.

In principle, there are two different meaningful approaches to the problem of dialect classification. First, it is possible to classify a given set of dialects on the basis of their synchronic similarity; this approach yields the best results in the case of large-scale data corpora that can be subjected to statistical measurements. Second, it is possible to classify dialects on the basis of their dissimilarities. Here the biblical method of shibboleths has only an illustrative function as being based on occasional dissimilarities. In linguistics, the most usual method is counting isoglosses between certain map points or a given set of dialects; this method can be improved by statistical measurements. Neither of the two methods, however, distinguishes between innovational and archaic features. More interesting are attempts to establish a historical hierarchy of dialect splits (and mergers) on the basis of a given set of innovations, first of all the sound changes and changes in the adaptation patterns of loanwords. As one can rarely prove the order of innovations, such attempts usually lead to competing historical hypotheses.

Characteristically, classifications based on similarities establish some centres and peripheries and ignore the historical development of the area whereas classifications based on dissimilarities may well ignore the actual similarity of dialects concentrating on the language history.

In a certain sense, the two approaches are complementary: there have been times when languages and dialects tended to fragment, and there have been times when languages and dialects merge with each other.

## 2.1. Existing classifications of Finnic

The first attempts to classify the Finnic languages or dialects were made in the 1800s. Characteristically, all the early attempts are impressionistic – none of such attempts presents any linguistic data to prove the correctness of the classification.

### 2.1.1. Eemil Nestor Setälä

After the impressionistic classifications in the 19<sup>th</sup> century, Setälä (1917) presented the first linguistic classification of Finnic. He divided the Finnic languages into the south-western and north-eastern subdivisions on the basis of three pairs of features: (a) retention vs. substitution for the mid front vowel *e* of the mid central vowel \**ɛ* (this vowel is rendered as *õ* in the conventional Estonian orthography), (b) vocalization vs. retention of \**n* of the cluster \**ns*, (c) the meaning and the quality of the diphthong in the cognate stem \**moista* ‘to understand’ vs. \**muista* ‘to remember’. According to Setälä, the south-western languages (Livonian, Estonian, Votic) have characteristically the first of each pair of features; the north-eastern languages have the second one.

In fact Setälä was mistaken in treating the vowel \**ɛ* as the donor of *e* in words with back vocalism; everywhere in Finnic *ɛ* results from innovations. Nevertheless, Setälä’s classification has remained the most popular one even in our days except that the two subdivisions are referred to as the southern and northern subdivisions and usually only the presence or absence of the vowel *õ* is mentioned. Although Setälä’s classification effectively demonstrates some characteristic features of Finnic main literary languages and most of unwritten or rarely written languages, it is incorrect because it ignores the Finnic dialects. Actually, the first, the second, and, in a way, even the third feature separate Coastal Estonian from the main body of the Estonian language area and Kukkuzi from the main body of what is traditionally referred to as the Votic language.

### 2.1.2. Heikki Ojansuu

Based on the study of Finnic pronouns, Ojansuu (1922) added West Finnish to Setälä’s south-western subdivision, which thus included Livonian, Estonian and West Finnish. Veps, Lude, Aunus-Karelian and East Finnish constituted the north-eastern subdivision. He also presented a list of characteristic features of the two subdivisions, which only many years later were critically

studied by Gyula Décsy (1965), Alo Raun (1971), Terho Itkonen (1983), and improved by Paul Alvre (1973).

### 2.1.3. Lauri Kettunen

According to Kettunen (1940a), the predecessor of the Finnic dialects, Proto-Finnic was spoken in the vicinity of the river Daugava, that is, in what is now Latvia. Proto-Finnic split into west and east. The western dialect split into Livonian, Estonian (i.e. North Estonian) and Häme. The eastern dialect is represented by Veps. Finnic later developed into dialect mixtures in contact zones on the way of moving northwards: (a) Livonian and Estonian were mixed into South Estonian, (b) Estonian and Häme were mixed into Votic, Häme and Veps into Karelian, Ingrian being a direct descendant of Karelian (cf. also Kettunen 1940b: 137–140), (c) Veps and Karelian were mixed into Aunus and Lude (in another place in the same article Lude was characterized as Veps, cf. Kettunen 1940a: 106–107). Kettunen's articles contain no linguistic evidence to support his speculations.

### 2.1.4. Paul Ariste

As a reaction to Kettunen, Ariste's (1956: 13) list of the oldest Finnic dialects included Livonian, North Estonian, Ugala (South Estonian), Karelian and Veps that existed already in the first millennium BC. South Estonian had been considered an independent group of Finnic already by Ferdinand Johann Wiedemann (1864). North-East Estonian, a direct descendant of North Estonian, was according to Ariste also the basis of Häme and Votic. Similarly to Kettunen, Ariste considered Ingrian a descendant of Karelian. Ariste did not discuss the origin of the five oldest dialects.

### 2.1.5. Alo Raun

In his study of Proto-Finnic dialects, Raun (1971) examined the characteristic features of subdivisions of Finnic presented in Ojansuu 1922 and Décsy 1965 and the lexicon of Ojansuu's south-western and north-eastern subdivisions. As Raun took into consideration more Finnic dialects than Ojansuu, he was the first linguist to turn his attention to four Finnic dialect groups representing different distribution types of the vowel *e*. He concluded that "the Finnic Northeast is much more of a unit than the Southwest. This does

not mean that Northeast separated from Southwest together as a unit, but that the members of the northeastern branch after separation got into close contact, i.e., were as if "reunited" On the contrary, the different members of the south-western branch remained separated, except for close relations between the Kodavere kind of Estonian and Votic" (Raun 1971: 96).

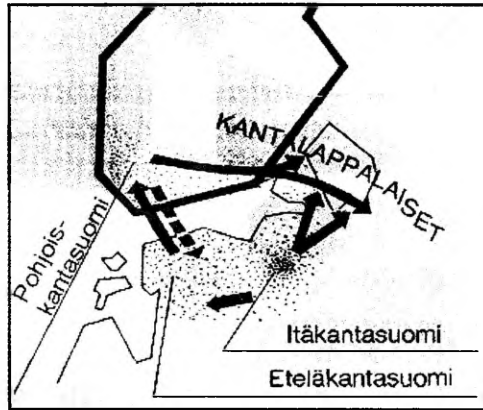
### 2.1.6. Arvo Laanest

Laanest (1972: 117) argued that the division of Finnic into peripheral and central represents the oldest situation. In that case, the peripheral group includes Livonian and Veps, that is, languages that remained outside the scope of grade alternation.

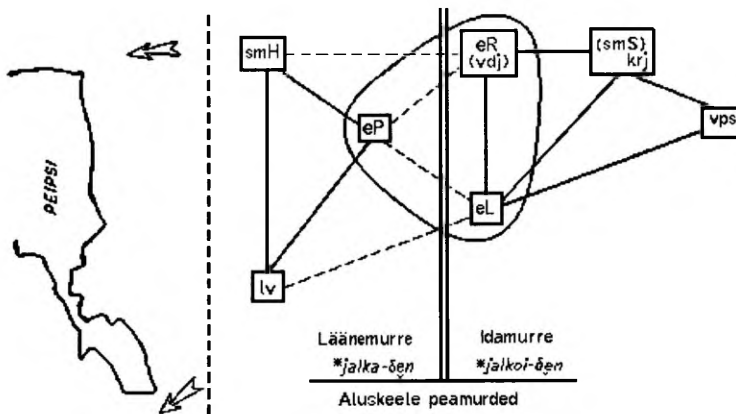
### 2.1.7. Terho Itkonen

According to Terho Itkonen (1972), Proto-Finnic was split into three protodialects: Southern Proto-Finnic (*eteläkantasuomi*), Northern Proto-Finnic (*pohjoiskantasuomi*) and Eastern Proto-Finnic (*itäkantasuomi*). Southern Proto-Finnic includes Livonian, Estonian, and Votic. Other Finnic languages share both Northern and Eastern Proto-Finnic features. Northern Proto-Finnic was originally spoken in Finland; South-West Finnish preserved contacts with Estonia for a considerably longer time than Häme. Eastern Proto-Finnic was spoken to the east of Lake Peipsi; it is only its influences that are preserved in modern languages. Votic has both Southern and Northern Proto-Finnic features. From a formal point of view, Itkonen's approach is a compromise between the approaches of Setälä and Ojansuu.

Itkonen returned to the subject also later, cf. Itkonen 1980, 1983, 1984. Itkonen (1980: 8) presents an interesting figure that shows in addition to the Northern and Southern Proto-Finnic invasion of the territory of proto-Lapps also backward influences in the direction of North-Western Estonia (cf. Figure 1).



**Figure 1.** Proposed territories of Southern Proto-Finnic (*eteläkantasuomi*), Northern Proto-Finnic (*pohjoiskantasuomi*), Eastern Proto-Finnic (*itäkantasuomi*) and Proto-Lapps (*kantlappalaiset*) according to Terho Itkonen (1980)



**Figure 2.** Main dialects of Proto-Finnic according to Paul Alvre (1973).  
The later main dialects of Estonian occupy the centre

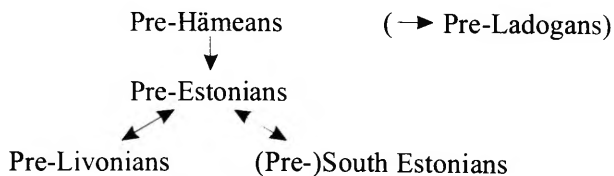
**Abbreviations:** the western dialect (*läänemurre*): **eP** – North Estonian, **lv** – Livonian, **smH** – Häme Finnish; the eastern dialect (*idamurre*): **eL** – South Estonian, **eR** – Coastal Estonian, **krj** – Karelian, **smS** – Savo Finnish, **vdj** – Votic, **vps** – Veps.

### 2.1.8. Paul Alvre

Alvre (1973) turned his attention to the precise distribution of two types of genitive plural formation of Finnic nouns and adjectives, one type having characteristically one pluralizer, the other two pluralizers, cf. e.g. the corresponding forms of the noun *jalka* ‘foot; leg’ \**jalka/δe/n* vs. \**jalka/i/δe/n*. (Alvre, similarly to Setälä, reconstructs \**e* in words with back vocalism instead of \**e*.) The distribution of these types was incorrectly presented in Ojansuu (1922). Alvre demonstrated that the two types of the genitive plural divide even the Estonian dialects, similarly to Finnish, into two groups. The type with one pluralizer is characteristic of West Finnish, North Estonian, and Livonian. The type with two pluralizers is characteristic of East Finnish, Karelian, Veps, Votic, Coastal and South Estonian. Alvre presented several additional arguments for that division. According to Alvre (1973: 160–161), the representatives of the \**jalka/δe/n* type were the first wave of invaders from the east. The divergence of this group must have begun already to the east of Lake Peipsi: predecessors of Livonians moved towards the south-west, Häme and North Estonian tribes moved towards the west, cf. Figure 2.

### 2.1.9. Pekka Sammallahti

According to Sammallahti (1977), after the split of Early Proto-Finnic into Proto-Lappic and Proto-Finnic in about 1000–600 BC Proto-Finnic split into South Estonian and the remaining Finnic; the latter into South Finnic (which later split into Livonian, North Estonian, and South-West Finnish) and into North Finnic (which later split into Häme and Proto-Ladoga). Sammallahti’s classification is based on sound changes, notably \**kt* > *tt* in South Estonian and \**kt* > *ht* elsewhere. He later (Sammallahti 1984: 142) argued for spreading innovations from the northern innovation centre to the southern population according to the scheme, cf. Figure 3.

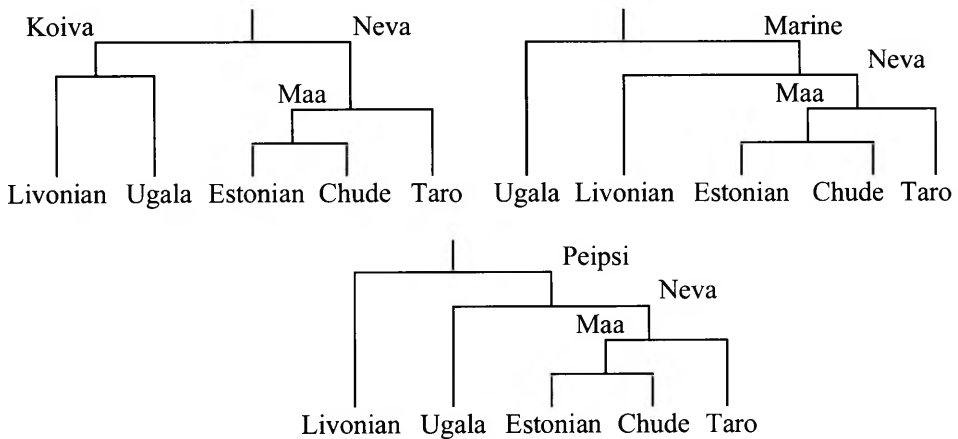


**Figure 3.** Directions of innovations from the north to the south according to Pekka Sammallahti (1984)

Finnic tribes: Pre-Hämeans (*esihämäläiset*), Pre-Estonians (*esivirolaiset*), Pre-Livonians (*esiliiviläiset*), (Pre-)South Estonians (*(esi)etelävirolaiset*), Pre-Ladogans (*esilaatokkalaiset*).

### 2.1.10. Tiit-Rein Viitso

Viitso (1978: 99) discussed three possible classifications of Finnic in connection with the framework of the history of the vowel  $\tilde{o}$ . The three trees in Figure 4 represent different possibilities of the rise of the five Finnic dialect groups each, except the  $\tilde{o}$ -less Taro group, having a different amount of stems with  $\tilde{o}$ . In addition to changes leading to the rise of  $\tilde{o}$  in different stem types, also a number of consonant changes were taken into account. As no formal criteria for choosing between the three bisections of Proto-Finnic were found, Viitso 1985 presented a compromise classification where Proto-Finnic had three descendants of the first level, namely Livonian, South Estonian, and Neva, cf. also Viitso 1998a: 101. Altogether 18 main Finnic dialects were classified, mainly on the basis of phonetic innovations.



**Figure 4.** Three possible classifications of Finnic according to Viitso (1978)

*Ugala* = South Estonian; *Estonian* = North Estonian; *Chude* = proper (i.e. West and East) Votic, NE Estonian, East Estonian; *Taro* = Coastal Estonian, Kukkuzi Votic, Ingrian, Finnish, Karelian, Lude, Veps.

### 2.1.11. Eino Koponen

Koponen (1991: 124–126) built two graphs that represent his idea of the rise of 17 main Finnic dialects from the three descendants of Proto-Finnic postulated in Itkonen 1983. Differently from Itkonen, Koponen treats Old Häme (*muinaishäme*) as a direct descendant of Northern Proto-Finnic and Old Veps (*muinaisvepsä*) as that of eastern Proto-Finnic. Southern Proto-Finnic has

two direct descendants: Old Livonian and Old Estonian. Most of the 17 Finnic dialects are considered mixed dialects. For example, South Estonian (*muinais-ugandi*) is a mixture of Eastern Proto-Finnic and Southern Proto-Finnic. It is noteworthy that Koponen manages without any linguistic data.

### 2.1.12. Kalevi Wiik

Wiik (1996) explained the rise of Finnic languages and dialects from Proto-Finnic as a result of contacts in the border area of languages or dialects. This article is a kind of review of his earlier manuscript. According to him, Proto-Finnic split into the coastal dialect and inland dialect of Late Finnic in the Bronze Age (1510–510 BC) as the coastal regions belonged to the Scandinavian bronze culture region, whereas the inland belonged to the region of textile ceramics and eastern bronze culture. As the coastal dialect in Finland underwent a stronger Germanic influence than that in the territory of Estonia and Livonia, the dialect split into Häme and North Estonian; the latter included also the later Livonian. While ignoring Wiik's archaeological reasoning, it can be realized that Wiik has placed Ojansuu's bisection of Finnic before Setälä's bisection to establish three protolanguages identical with those proposed by Terho Itkonen. In the later course of development, the northern part of the inland dialect underwent a Permic influence and developed into Veps, the southern part underwent a Volgaic influence and developed into Chude. Later new Finnic dialects rose as a result of dialect mixture, first on the borders of Häme, Veps, Chude, and North Estonian, later on the new dialect borders. Thus, interrelations of 26 dialects were postulated. Similarly to Koponen, Wiik manages without any linguistic data. Claims on Permic and Volgaic influence are not based on linguistic evidence but by analogy with drifts of archaeological cultures.

### 2.1.13. Heikki Leskinen

According to Leskinen (1999), the rare stripe of Finnic languages reached from south of Ladoga to South-West Finland and to the Baltics and split into the northern and southern subdivisions by the Gulf of Finland. The western ends of the subdivisions, i.e. the Northern Estonia and South-Western Finland fell under the influence of Germanic and Baltic languages and developed into innovation centres whose innovations spread to the east and south-east. Thus, both northern Proto-Finnic and eastern Proto-Finnic were probably divided into the western core and the eastern background or into the

western and eastern groups. Hence, Leskinen's classification places Setälä's bisection before Alvre's version of Ojansuu's bisection.

#### 2.1.14. The 20<sup>th</sup> century classifications: outlines

Most classifications in 1917–1999 represent one of the four main paradigms that have influenced each other and each in its own way proposed a secession of one or two peripheral Finnic dialects from a compact centre as the first split of Proto-Finnic. It is possible to distinguish between four periods of development, cf. Table 1. Anyway, the first split is either postulated on the ground of experience-based intuition, or it reflects a formal bisection of the Finnic linguistic area on the basis of some innovations. Ariste 1956 remains formally incomparable because he has avoided the problem of the first split of Proto-Finnic.

Several linguists have tried to date the first language splits. In the first half of the 20<sup>th</sup> century the separation of Finnic was considered to take place only in the middle of the 1<sup>st</sup> millennium, the formation of Finnic dialects was still later. Paul Ariste (1956) was the first linguist who moved the rise of ancient Finnic dialects into the 1<sup>st</sup> millennium BC. In fact, his datings were based on the work of Estonian archaeologists, first of all of Harri Moora (1956), which however were preceded by Richard Indreko (1947).

**Table 1.** Classifications of Finnic dialects on the basis of their first split

1. North vs. South	Setälä 1917		Laanest 1972	Leskinen 1999
2. West vs. East	Ojansuu 1922	Kettunen 1940	Alvre 1973	Wiik 1996
3. South vs. North vs. East			Itkonen 1972, 1983	Koponen 1991
4. Periphery vs. centre			Laanest 1972	Sammallahti 1977 Viitso 1978, 1985

#### 2.2. Finnic as a dialect continuum

In order to build up a picture of the Estonian dialects as formed by innovations shared by dialects of different Finnic languages, Figure 5 presents a scheme exhibiting the distribution of a set of Finnic innovation types in Estonian and two innovations whose range does not extend outside the language boundary. Because of shortage of space, only a selection of changes and only the Estonian linguistic area can be presented on one page.

There exist innovations that cover the Estonian area but do not cover the whole Finnic space, cf.

- (1) vocalization and/or loss of final *\*n* everywhere except in 1Sg (*\*kalan* ‘fish (GSg)’ > *\*kalā* (> *kala*)) in Livonian and Votic;
- (2) weakening of intervocalic single stops  $\{*p \ *t \ *k\} > \{\check{p} \ \check{t} \ \check{k}\}$  after unstressed syllables preceded by a long stressed syllable, i.e. the so-called suffixal gradation (*\*antatak* ‘to live (Inf)’ > *\*antaĭak*) in Livonian, Votic, Ingrian, Finnish, and Karelian;
- (3) gradation of single stops after stressed syllables (*\*ūtehen* ‘new (IllSg)’ NPl *\*ūĭet*) in Livonian, Votic, Ingrian, Finnish, and Karelian;
- (4) original geminate stops in the strong grade alternate with single stops in the weak grade after a resonant, long monophthong or diphthong (*\*kurkku* ‘throat’ GSg *\*kurkun*, *\*aitta* ‘barn’ GSg *\*aitan*) in Votic, Ingrian, Finnish, Karelian, and Lude;
- (5) comitative in *-kaa ~ -ka ~ -ga* (from *\*kanssa*) instead of a former postpositional phrase in Votic, Lower Luga Ingrian, and Narvusi Finnish;
- (6) alternation of *\*lk* and *\*rk* in the strong grade with (*\*lĭ* >) *l* and (*\*rĭ* >) *r* before *\*e* in the weak grade (*\*kurĭken* ‘crane (GSg)’ > *kure(n)*) in East and Kymenlaakso Häme Finnish, East Finnish, and North Karelian.

Estonian is alongside Livonian, Votic and Veps a Finnic language that has at least one non-lexical innovation of its own which covers all the language area, namely the neccessive construction of the type *\*pitä-* ‘must’ + THE ILLATIVE OF A *ma*-SUPINE (*\*pitān tekemāhen* ‘I must do’).

[illegible]

**Figure 5.** Estonian innovations, shared with other Finnic dialects

## Key:

- 1 **p** IndPr3Sg in *\*-pi* (*\*jõpi* ‘he drinks’) (Li-Vo-In-Fi-Ka-Lu-Ve)
- 2 **u** Genitive plural of nouns with one single pluralizer (*\*jalka/te/n* ‘feet’) (Li-FiW)
- 3 **d** Genitive plural of nouns with two pluralizers (*\*jalka/i/te/n* ‘feet’) (Vo-In-FiE-Ka-Lu-Ve)
- 4 **h** Inessive in *\*-hnA* < *\*-snA* (FiEP)
- 5 **n** Inessive in *-n* (< *\*-hnA*) (EsS)
- 6 **N** Essive in *\*-nnA* instead of *\*-nA* (Vo-In-FiNar)
- 7 **□** 1Pl in *\*-mmO* (< *\*-mme*) and 2Pl in *\*-ttO* (< *\*-tte*) (FiS, KaA)
- 8 **★** 1Pl in *\*-mma* (< *\*-mme*) and 2Pl in *\*-tta* (< *\*-tte*) (Vo-In-FiE-Ka-Lu-Ve)
- 9 **♣** Front vocalic adaptation pattern for *\*e-a* (*\*metsä* ‘woods’) (Vo-In-Fi-Ka-Lu-Ve)
- 10 **♠** Back vocalic adaptation pattern for *\*e-a* (*\*metsa* ‘woods’) (Li)
- 11 **ö** *\*e* > *\*ö* in nominative of pluralic personal pronouns (*\*mõ* ‘we’ *\*tõ* ‘you’ *\*hõ* ‘they’) (Vo-In-FiE-Ka-Lu-Ve)
- 12 **O** *\*e* ≥ *e* in back vocalic words (*\*velka* > *\*velka* ‘debt’) (Li-Vo)  
*\*o* > *e* in 10 stems (*\*kovera* ‘crooked’ > *\*kevera*, *\*voi* ‘butter’ > *\*vei*) (Li-Vo)
- 13 **⊙** *\*o* > *e* in 25 stems (*\*korva* ‘ear’ > *\*kerva*, *\*loppu* ‘end’ > *\*leppu*, *\*noki* ‘soot’ > *\*neki*) (Vo)
- 14 **⊖** *\*o* > *e* in 6 stems (*\*korketa* ‘high’ > *\*kerketa*, *\*olka* ‘shoulder’ > *\*elka*, *\*oppi-* ‘to learn’ > *\*eppi-*) (Vo)
- 15 **⊕** *\*o* > *e* in *\*jouhi* ‘horsehair’ > *\*jeuhi*, *\*lounako* ‘south-west’ > *\*leunako*, *\*pouta* ‘drought’ > *\*peuta* (Li-Vo)
- 16 **⊕** *\*o* > *e* in *\*po(v)vi* > *\*pe(v)vi* *\*jouta-* > *\*jeuta-* ‘to be able’ (Vo)
- 17 **⊙** *\*o* > *e* in 13 stems (*\*kohta* ‘place’ > *\*kehta*, *\*oja* ‘creek’ > *\*eja*, *\*oksa* ‘branch’ > *\*eksa*, *\*orava* ‘squirrel’ > *\*erava*) (Vo)
- 18 **⊙** (*\*e* >) *\*e* > *o* (*\*kerta* ‘turn, time’ > *\*korta*, *\*ketara* ‘spoke’ > *\*kotara*) (EsN)
- 19 **l** *\*nouse-* ‘to rise’ > *noise-*, *neise-* (Vo-In)
- 20 **▣** Breaking of long open vowels {*\*ā* *\*ā̃*} > {*oa* *eä*} (> {*ua* *iä*} > {*ia* *iä*} (*\*mā* ‘soil, land, country’ > *moa*, *mua*) (FiE-Ka)
- 21 **Π** {*\*pć* *\*kć*} > *ťś* (*\*lapci* ‘child’ > *laťś*, (*\*ükti* >) *\*ükci* ‘one’ > *űrś*);  
{*\*ps* *\*ks*} > *ss* (*\*lüksä-* ‘to milk’ > *nüssä-*, *\*oksaksi* ‘branch (translative)’ > *ossass*) (EsS)
- 22 **▲** (*\*str* >) *\*sr* > *hr* (*\*ostra* ‘barley’ > *\*ohra*) (FiW)
- 23 **▼** *\*str* > *\*tr* (*\*ostra* ‘barley’ > *\*otra*) (Li-Vo-FiE)
- 25 **t** Geminate stops alternate with single stops after a short vocalism (*loppu* ‘end’ : GSg *lopun*) (Vo-In-Fi-Ka-Lu-Ve)
- 26 **\$** Gradation of long stressed syllables with the original short vocalism (North Estonian *\*silma* ‘eye’ PSg *\*silma* vs. GSg *\*silma*; Livonian PSg *\*silmo* vs. NGSg *\*silma* ‘eye’)
- 27 **x** The weak grade of a geminate stop after a short monophthong is identical with the strong grade of the corresponding single stop (*\*kattaĭak* ‘to cover’ : *\*katan* ‘I cover’ *\*sata* ‘hundred (nominative)’ : GSg *\*saĭan* ‘hundred’) (Vo-In-Fi-KaN)
- 28 **j** *\*t* in the strong grade alternates with (*\*ĩ* >) *j* in weak grade in the environment *a\_a* (*\*paĭan* ‘pot, cauldron’ (GSg) > *paja*, *\*saĭan* ‘hundred (GSg)’ > *saja*) (FiEP)
- 29 **⊖** *\*t* in the strong grade alternates with (*\*ĩ* >)  $\emptyset$  in weak grade in the environment *a\_a* (*\*paĭan* > *paa*, *\*saĭan* > *saa(n)*) (In-FiE-Ka)
- 30 **&** Gemination of a single intervocalic consonant after a short monophthong in trisyllabic singular nominative forms with an open final syllable (*\*jumala* ‘god’ > InS, InH *jummaala*, EsS *jummal* ~ *jummal*)
- 31 **▣** Palatalization of consonants in disyllabic *\*i*-stems both before a lost and a retained *\*i* (*\*kulli* ‘hawk’ : NPl *\*kullit* > *kuľ* : Es *kuľliv*, Li *kul’äd*)
- 32 **▽** Vocalization and/or loss of final *\*n* in 1Sg (*\*anĭan* ‘I give’ > VoE *annā*) (Li-VoE)
- 33 **s** *\*s+t* > *ss* (*\*pestäk* ‘to wash’ > *\*pessäk*) (Vo-In-FiSe)

### 2.2.1. Natural bisections of the Finnic continuum

The different classifications of the Finnic languages were put forward because different innovations from different directions in different times have crossed the existing dialect or language boundaries, and so a dialect continuum with a few clear boundaries was formed. In order to establish the former and existing language and dialect boundaries, it is meaningful to look for bisections of the Finnic space. Previous research has established six bisections of the Finnic linguistic continuum into two dialects so that either of them has at least one innovation that is absent in another. For any two different dialects, their boundary is defined by the borderline of innovations *i* and *j*.<sup>1</sup>

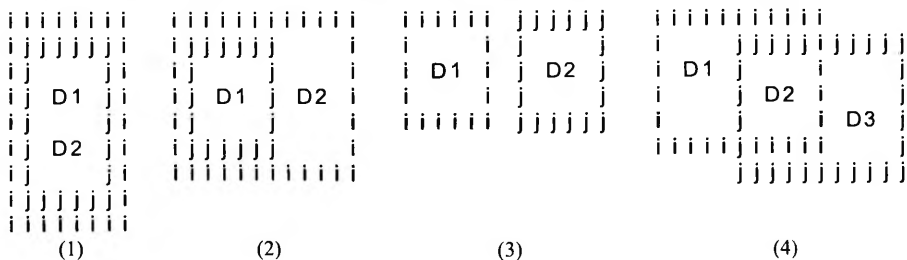
There exist four bisections (1)–(4) of the Finnic area that are based on a pair of mutually exclusive innovations and two (5)–(6) bisections based on unrelated innovations, namely

- (1) South Estonian vs. other Finnic dialects, cf. 2.2.2,
- (2) South Estonian and Livonian vs. other Finnic dialects, cf. 2.2.3,
- (3) Harjumaa Estonian, West Finnish, Soikkola Ingrian, Karelian, Lude, and Veps vs. all the other dialects, cf. 2.2.4,
- (4) Livonian, North Estonian and West Finnish vs. other Finnic dialects, cf. 2.2.5,
- (5) Lude and Veps vs. other Finnic dialects, cf. 2.2.6,
- (6) Livonian vs. other Finnic dialects cf. 2.2.7.

### 2.2.2. South Estonian versus other Finnic dialects

Nobody has ever tried to exhaustively describe how South Estonian differs from the other Finnic dialects. At any case, there exist several interesting old correspondences of South Estonian versus Livonian and Neva Finnic, cf. Table 2 and Figure 6.

<sup>1</sup> Given two innovations *i* and *j*, in a dialect continuum *D*, the two innovations may be interrelated in four different ways (1)–(4). For case (1) *D1* and *D2* are identical. For case (2), *D1* is an innovative and *D2* is an archaic dialect in *D*. For case (3), *D1* and *D2* are different dialects within *D*, each defined by a characteristic innovation. For case (4), either (a) *D2* is a transitional subdialect of dialects *D1* and *D3* or (b) *D1* and *D2* are archaic marginal subdialects of *D2*.



**Table 2.** South Estonian vs. other Finnic languages

	Reconstruction	South Estonian	Livonian	North Estonian	Finnish	Veps
(1)	* <i>lapci</i> > * <i>lapši</i> 'child'	<i>ˈlaʃs</i>	<i>läpš</i>	<i>ˈlaps</i>	<i>lapsi</i>	<i>laps</i>
(2)	* <i>ukti</i> > * <i>üktši</i> 'two'	<i>ˈütš</i>	<i>iks</i>	<i>ˈüks</i>	<i>yksi</i>	<i>üks</i>
(3)	* <i>näktü</i> 'seen (IpsPastPle)' * <i>kaktesen</i> 'two (IIIsg)'	<i>ˈnättü</i>  <i>ˈkattõ</i>	<i>nāˈdõd</i>  <i>kõˈdõ</i>	<i>nähtud</i>  <i>ˈkahte</i>	<i>nähty</i>  <i>kahteen</i>	<i>nähtu</i>  <i>kahthe</i>
(4)	* <i>ektako</i> 'evening'	<i>ˈõtak</i> : GSg <i>ˈõdagu</i>	<i>õˈdõg</i>	<i>ˈõhtu</i>	<i>ehtoo</i>	<i>eht -a</i>
(5)	* <i>anta</i> /* <i>antapi</i> 'gives' * <i>eläksen</i> /* <i>eläp</i> 'lives'	<i>ˈand</i> <i>ˈeläss</i>	<i>āndab</i> <i>jelāb</i>	<i>annab</i> <i>ˈelab</i>	<i>antaa</i> <i>elää</i>	<i>andab</i> <i>eľäb</i>
(6)	* <i>näknüt</i> 'seen (PsPastPle)'	<i>ˈnännüq</i>	<i>nāˈnd</i>	<i>näinud</i>	<i>nähnyt</i>	<i>nähnu</i>

Four of the five correspondences in Table 2 result from different innovations in each side of the South Estonian border, cf.  $\{*ptš \text{ } *ktš\} > tš$  and  $*kt > \{*tt \text{ } *t\}$  in South Estonian and  $\{*ptš \text{ } *ktš\} > \{*ps \text{ } *ks\}$ ,  $*kt > *ht$  elsewhere. None of the innovations occurs in some borrowed stem.

Correspondence (5) concerns the major typological difference of the structure of the third person singular present indicative of South Estonian from that of other dialects. Probably South Estonian reflects an older situation (note that alongside of the verb type with unmarked third person singular present indicative forms (*ˈand* '(he) gives') another more aggressive verb type with third person singular present suffixes from the former reflexive or medial conjugation is used (*ˈsööse* '(he) eats', *ˈistuss* '(he) sits').

For correspondence (6) the South Estonian change  $*kn > nn$  follows the general pattern of South Estonian sound changes in Table 2, but other Finnic dialects do not behave as a group any more.

### 2.2.3. South Estonian and Livonian versus other Finnic dialects

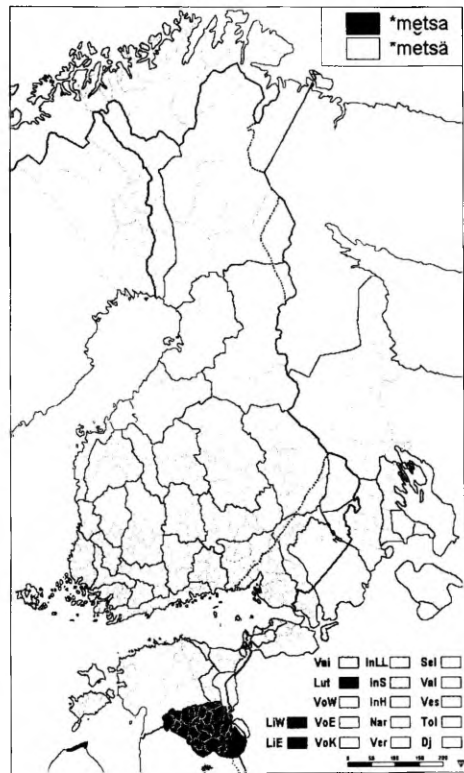
South Estonian and Livonian have similar vowel patterns in three types of stems that contrast with patterns of other Finnic languages, cf. Table 3 and Figure 7. Different stem variants in type (1) were either borrowed from different Indo-European dialects or represent two different adaptation models of stems of patterns *eiCa* and *ei(C)Co* that contradicted the Finnic vowel

harmony. Similarly, types (2) and (3) represent different adaptation models of the pattern *eC(C)a*. *nõna* as contrasting with *\*nenä*. On the other hand, the duality of South Estonian may well be a hint of the circumstance that South Estonian was not a whole when the stem was received by Finnic. Stem variants in type (3) clearly belong to two models of adaptation of stems that contradicted vowel harmony. Type (4) probably owes its rise to the raising *\*ä > e*, except in Livonian and South Estonian.

In addition there are cognates that (a) define Livonian and South Estonian as a group but divide other dialects into two groups or (b) define all other languages except Livonian and South Estonian as a single group but divide Livonian and South Estonian dialects into two groups, and (c) represent stems of groups (1) or (2) but for different reasons classify the Finnic dialects into four groups.



**Figure 6.** South Estonian vs. all the other dialects



**Figure 7.** South Estonian and Livonian vs. all the other dialects

**Table 3.** Livonian and South Estonian versus other Finnic dialects

	Reconstruction	Livonian	S Estonian	N Estonian	Finnish	Veps
(1)	<i>*haina/*heinä</i> 'hay'	<i>āina</i>	<i>hain -a</i>	<i>hein -a</i>	<i>heinä</i>	<i>hein ~ hiin -a</i>
	<i>*saina/*seinä</i> 'wall'	<i>sāina</i>	<i>sain -a</i>	<i>sein -a</i>	<i>seinä</i>	<i>sein ~ siin -a</i>
(2)	<i>*metsa/*metsä</i> 'wood'	<i>mōtsā</i>	<i>mōts -a</i>	<i>mets -a</i>	<i>metsä</i>	<i>mec -a</i>
(3)	<i>*nana ~ *nena/*nenä</i> 'nose'	<i>nanā</i>	<i>nana</i> ~ <i>nōna</i>	<i>nina</i>	<i>nenä</i>	<i>nena</i>
(4)	<i>*kā?kā/*ke?kā</i> 'shoe'	<i>kā nga</i>	<i>käng -ä</i>	<i>king -a</i>	<i>kenkä</i>	<i>keng -a</i>
	<i>*sälkä/*selkä</i> 'back'	<i>sā lga</i>	<i>sälg -ä</i>	<i>selg -a</i>	<i>selkä</i>	<i>selg -a</i>

A. The Baltic borrowings with the meaning 'pole, picket', whose cognates in Baltic languages (Lithuanian *stiebas*, Latvian archaic *stiebs*) are derived from the Proto-Indo-European *\*steib(h)-* > Proto-Baltic *\*steib-* > Proto-East Baltic *\*stieb-* (Thomsen 1890: 219–220, Kalima 1936: 160, Karulis 1992: 294) can be treated as belonging to type (1), cf. Viitso 1994: 256. However, this stem has four variants in Finnic that can serve as a linguistic and geographic argument for an early quadrusection of Finnic dialects, cf. Table 4. The table does not take into account that in Mulgi South Estonian, except in Helme, the North Estonian *ei*-forms have replaced the *ai*-forms in type (1), cf. Pajusalu 1996: 37–38.

**Table 4.** Reflexes of the Baltic stem *\*steibas* 'pole, picket' in Finnic

	<i>t-</i>	<i>*s-</i>
-ei-	North Estonian <i>teivas</i> GSg <i>teiba</i> (< <i>*teipäs</i> : <i>*teipähän</i> )	<i>*seipäs</i> GSg <i>*seipähän</i> Votic <i>seiväs</i> <i>seipää</i> Ingrian <i>seiväs</i> : <i>seipähän</i> Finnish <i>seiväs</i> <i>seipään</i> Veps <i>seibaz</i> : <i>seibhan</i>
-ai-	Livonian <i>tāibaz</i> : GSg <i>taibō</i>	South Estonian <i>saivass</i> GSg <i>saiba</i>

B. The most common Finnic cognate set for 'to stand' *\*saisa-/\*seisä-* ~ *\*seiso-*, which is absent in Livonian, is represented by an *a*-stem in South Estonian (*ma saisa* 'I stand'), by an *\*ä*-stem in North and East Estonian (*seisa-* ~ *seisä-*), and, obviously secondarily in Coastal Estonian, by an *\*o*-stem in Votic (*sōiso-*), Ingrian and Finnish (*seiso-*), Karelian (*seiso-* ~ *seižo-*), and an *u*-stem in Coastal Estonian (*seisu-*), Aunus, Lude and Veps (*seižu-* ~ *siižu-*). Probably the stem vowel *u* comes from *\*o*. North-East Estonian has the *a*-stem *sōisa-*. Here obviously both the stem vowel and conjugation type

of the former *sōiso*- have been replaced under the influence of North Estonian. The equivalent of the verb in Lappic, cf. South Lapp *tjoåddjudh*, North Lapp *čuožžot*, Kildin *čueññžet* (< \*čōñčō-) was an \**o*-stem with an \**a* in its initial syllable.

C. The cognate set \**nana*/\**nena*/\**nenä* 'nose', cf. Livonian *nanā*, Sangaste South Estonian *nana*, elsewhere in South Estonian *nōna* (< \**nena*), North Estonian *nina* (< \**nenä*), Coastal Estonian, Votic, Ingrian, Finnish, Karelian *nenä*, Veps *nena* (< \**nenä*) is problematic because of the South Estonian twofold occurrence of the stem. As the corresponding Lappic stem, cf. Proto-Lappic \**nōnē*, South Lapp *njuōnie*, North Lapp *njunne* goes back to \**nana*, it is likely that the Livonian and Sangaste form represents the oldest adaptation model of patterns of the type \**eC(C)a*. In that case South Estonian was probably either already divided or was not integrated enough at the time of the adaptation of this stem in South Estonian. On the other hand, there exists the possibility that the Sangaste form is pseudoarchaic: the vowel *a* in the initial syllable may be substituted for *ō* under the influence of the vowel of the following syllable.

D. The stem for 'castle' or, secondarily, 'town, city' is reconstructable as \**litna*. The stop \**t* has been voiced in Votic, Lude and Veps, assimilated by the preceding vowel in Livonian and South Estonian, and by the following nasal elsewhere in Finnic, cf. Votic *lidna* 'town', Lude *lidnē*, Veps *lidn*; Livonian *nīn* 'castle' (with the characteristic Livonian aberrant change *l* > *n* under the influence of the following postvocalic nasal), South Estonian *liin* 'town, city', North Estonian *linn*, Kukkuži and Ingrian *linna*, Finnish *linna* 'castle', Karelian *linna* 'castle; town'. The stem was borrowed probably from Finnic to Lappic, cf. North Lapp *lād'ne* 'castle', Inari *lanne* (SSA 2: 79). Although the stop is an archaic feature both in Finnic and North Lapp forms, the North Lapp *lād'ne*, together with the cognate of Finnic \**haina*/\**heinä* in Lappic (type (2)), cf. South Lapp *suōinie*, North Lapp *suoi'dne* where the triphthong is a regular reflex of \**ai*, makes an argument for the hypothesis that invading predecessors of modern Finns and maybe also of Ingrians and Karelians penetrated the former border area of Lappic and non-North Finnic type Finnic (cf. Viitso 1996a: 116, 120).

#### 2.2.4. Northern periphery versus the southern centre

Innovations related to the simplification of the cluster \**str* in 2–4 borrowed stems are interesting because of creating a picture of a former northern Finnic group with a characteristic innovation \**str* > \**sr* being split by an invasion of a southern group with a characteristic innovation \**str* > \**tr*, cf. the Map in

Figure 8. What remains problematic is (a) was the *hr*-area in Finland inhabited from Estonia or from the East, (b) is the cluster *hr* (< \**sr*) in Harjumaa North Estonian and Western Coastal Estonian a non-Estonian substratum feature, a North Estonian substratum feature, or a relatively late adstratum feature.

### 2.2.5. Livonian, North Estonian and West Finnish versus other Finnic dialects

The distribution of the two genitive plural patterns of disyllabic \**a*-stems, cf. \**jalka/te/n* ‘feet’ > EsN *jalgade*, Fi *jalkain* vs. \**jalka/i/te/n* ‘feet’ > EsS *jalgo*, Fi *jalkojen*, led Paul Alvre (1973) to the classification of Finnic presented in 2.1.8. Both patterns are considered innovational, the oldest genitive plural was marked only for number, e.g. \**silmäi* > \**silmi* ‘of eyes’, represented as Estonian *silmi-*, Finnish *silmi-* in rare compounds.

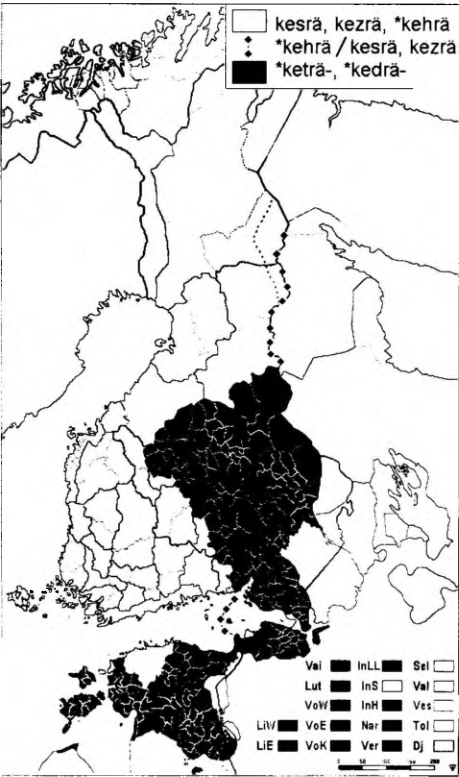


Figure 8. Harjumaa Estonian, West Finnish, Soikkola Ingrian, Karelian, Lude, and Veps vs. all the other dialects

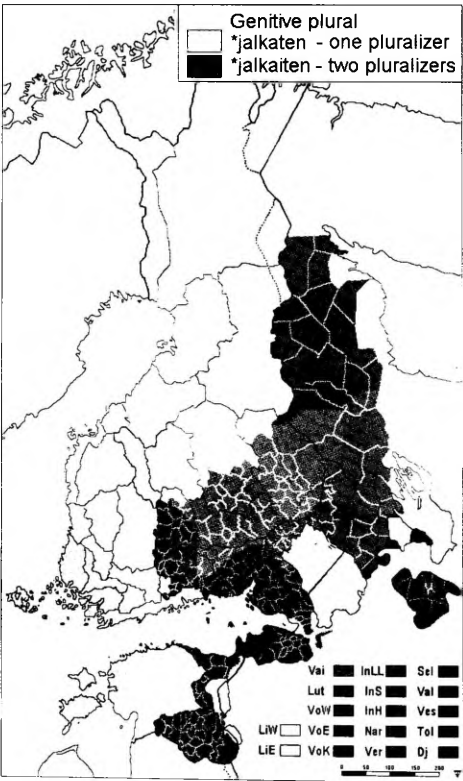
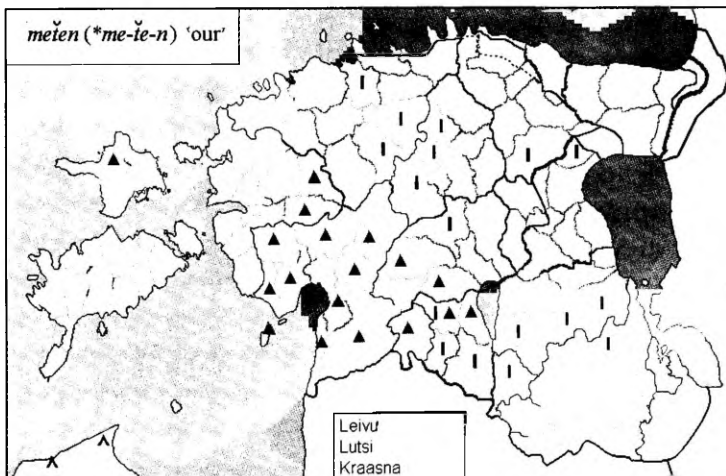


Figure 9. Livonian, North Estonian, and West Finnish vs. all the other dialects

On the other hand, Lauri Kettunen's comment (1940d: 324) to Map 186 in his atlas of Finnish dialects (Kettunen 1940c) first considered the patterns to be a remarkable general characteristic feature of the western and eastern dialects of Finnish, and then admitted that the distribution of the two types does not follow the well-known dialect boundaries, cf. Figure 9. Kettunen thinks that in the South, certain Häme dialects were affected by East Finnish and in the North one part of Savo dialects was influenced by West Finnish. Following Martti Rapola (1933: 157), Kettunen points that in older literary Finnish the prevailing type was with one pluralizer. Rapola (1933: 158), moreover, claims that already beginning from Agricola, there was a tendency to substitute the type with two pluralizers for forms with one pluralizer omitting, however, the reflex *dh* of the pluralizer *\*t*, e.g. *Isein* for *Isädhēn* 'of fathers' Estonian, on the other hand prefers the type with one single pluralizer. For example, in East Estonian, reflexes of forms with two pluralizers of disyllabic stems can be found only when followed by a postposition.

Still the geographical distribution of these patterns for monosyllabic vocalic stems and personal and demonstrative pronouns is amazingly different. In Finnish, according to Kettunen (1940c, Map 78), the monosyllabic vocalic noun stems have only genitive plural forms with two pluralizers. In Estonian, the occurrence of genitive plural forms with two pluralizers for monosyllabic vocalic stems is restricted mostly to Coastal, North-East, East, and South Estonian (except the main body of Mulgi South Estonian) and their neighbourhood.



**Figure 10.** Reflexes of the form *\*meřen* 'our, ours (genitive plural)' with one pluralizer in Finnic

**Key:** Firm reflexes of *\*me-ře-n*: ▲ *mede*, ▲ *mä'd*

Ambiguous reflexes of underlying forms *\*me-ře-n* or *\*me-i-ře-n*: I *me(e)*.

For pronouns, the model with one pluralizer is characteristic of Livonian and, depending on the pronoun, only of some parts of Estonia, i.e. the south-west of the Finnic space, cf. Figure 10 where in addition to two clear cases with one pluralizer also a problematic form *me(e)* is presented. As an allegro form, *me(e)* can formally be a reflex of both *\*meïen* and *\*meïen*.

The unique geographical distribution of the two patterns of genitive plural formation of nominals of different stem types in Finnish and Estonian is absent probably due to the different measures taken to prevent the loss of morphological transparency because of monophthongization of diphthongs in non-initial syllables and/or loss of the weakened stop *\*ĩ* in the pluralizer *\*-ĩ(e)-*. In Estonian, the difference in the geographical distribution of the two patterns of genitive plural formation of nouns, adjectives, and numerals as compared with that of pronouns is probably conditioned by the relative simplicity of the model with one pluralizer. As the plural genitive formative nowhere affects the stem vowel, this model may have effectively replaced the model with two pluralizers in the noun, adjective, and numeral declensions in vast territories. As to pronouns, the simplicity of the model is unimportant because the genitive forms of plural personal pronouns are frequent enough to be learned as such.

### 2.2.6. Lude and Veps versus other Finnic dialects

The western boundary of the change of the initial pre-vocalic *\*v* to *b* before a vowel followed (a) by *p* or *b* directly or in a consonant cluster or (b) by a cluster *ng* (*\*varbaz* ‘toe’ > Lude and Veps *barbaz*) coincides with the north-eastern boundary of the gradation of single stops after stressed syllables (*\*ũtehen* ‘new (IllSg)’ NPI *\*ũtet* > Livonian *ũdõ* : *ũd*, Estonian *uude* : *uued*, South Estonian *uudõ* : *uvvõq*, Votic *uutõõ* : *uvvõd*, Finnish *uuteen* : *uudet*; cf. North Veps *uudhe* : *uuded*).

This bisection (5) is somewhat problematic because arguments for the single stop gradation in Livonian are scanty. There are altogether three nominals and three verbs whose inflectional paradigms show traces of the former alternation of a stop with the absence of the stop and one causative derivative whose base stem lost the stem consonant *d* (cf. *kõ'ĩõ* ‘to lose’, 3Sg *kõ'ĩõb* from *ka'ddõ* ‘to get lost, disappear’, 3Sg *kadũb* as contrasted to *pu'dtõ* ‘to drop (tv)’, 3Sg *pu'dtõb* from *pu'ddõ* ‘to drop (iv)’, 3Sg *pudũb*) so that the losses can be explained by gradation. On the other hand, there exist more or less similar stems that have retained their stops throughout the paradigm.

### 2.2.7. Livonian versus other Finnic dialects

This bisection is based on the existence of the preservation in Livonian of the distinction of the Proto-Finnic *\*kt* and *\*ktt* and of the later *\*ht* and *\*htt* as in the illative forms *\*üktehen* > *\*ühthehen* and *\*kaktehen* > *kahtehehen* vs. the partitive forms *\*ükttä* > *\*ühttä* and *\*kaktta* > *\*kahtta* of the numerals *\*ükti* 'one' and *\*kakti* 'two', cf. Livonian *ī'dõ* and *kõ'dõ* vs. *ī'dtõ* and *kõ'dtõ* (Viitso 1998a: 102). Elsewhere in Finnic the contrast between the two clusters is neutralized, cf. North Estonian *üht(e)* : *ühthe*, South Estonian *ütte*, Votic *ühtä* : *ühtee*, Finnish *yhtä* : *yhteen*, Veps *üht* : *ühthe*. On the other hand, Livonian has numerous innovations where other Finnic dialects remained unchanged.

### 2.2.8. Bisections and the primary dialect split

The presence of five or six bisections of the area means that there exist five or six possibilities of building a classification tree of the whole dialect set. Two bisections out of the five have been used as the bases of classifications of Finnic dialects. Bisection (1) or, actually the innovation *\*kt* > *tt* vs. *\*kt* > *\*ht* was used in the classification of Pekka Sammallahti (1977). There exists a problem whether the intervocalic *\*kt* changed into *tt* directly (as supposed traditionally) or rather via *\*ht*, cf. (*ma*) *'lää* ~ *'lähä* 'I go' from *\*lähien* < *\*lähten* < *\*läkten* (as pointed in Viitso 1978), but e.g. the changes of *\*pfši* and *\*kfsi* make no problems. It is unknown whether the neutralization of *\*kt* and *\*ktt* or *\*ht* and *\*htt*, cf. bisection (6), is earlier or later than changes *kt* > *tt* and *\*kt* > *\*ht*. Bisections (2) and (3) are based on borrowings. In addition, bisection (2), i.e. the two patterns of adaptation of sound patterns contradicting the Proto-Finnic vowel harmony were discussed in Viitso 1978. Some properties of bisection (3) were discussed in Viitso 2000: 172. If Ingrian *azra* 'fishing spear', Karelian *asrain* ~ *azrain* etc., Lude *azraim*, *azrag*, Veps *azrag* are really borrowed from Russian *ostrogá* as traditionally believed, cf. SSA 1. 54–55, then bisection (3) is very late. Although bisection (3) may really be later than bisection (2), Finnish *ahrain* rather points that an old Slavic borrowing has lately and locally undergone modifications under the influence of Russian. Bisection (4), i.e. the two patterns of genitive plural formation served as the basis of the classification of Paul Alvre (1973). Bisection (5) most probably reflects a relatively late stage when Lude and Veps were somewhat isolated from the main body of Finnic dialects, which still functioned as a contact area.

It is likely that bisections (3), (4) and (5) hardly reflect the first split of Finnic.

### 2.3. Estonian dialects in the Finnic continuum

In Figure 5, five main Estonian dialect groups can be established. Only two of them have a common characteristic innovations of their own, notably South Estonian (innovation type 21), North Estonian (18), cf. *\*ē > o* in (*\*kerta > \*kerta > 'kord* 'time, turn', (*\*ketara > \*ketara > 'kodar* 'spoke' Coastal Estonian differs (a) from all the other Finnic dialects by the change *\*t > s* or rather *\*ti > si* in the imperfect forms of disyllabic *\*a*-stems with *a* in a long initial syllable, cf. *ans(i)* 'he gave', *kans(i)* 'he carried' (cf. innovation type 32), and (b) from other Estonian dialects by two innovations (25 and 27) shared first of all with Votic, Ingrian, and Finnish. East and North-East Estonian are opposed to other Estonian dialects by their common innovation (17), which they share with West and East Votic. Obviously, East and North-East Estonian once formed together with West and East Votic a unity called Chudic, see Viitso 1978. In the conditions of a long-lasting separation, East and North-East Estonian have integrated with North Estonian (i.e. these varieties were strongly influenced by North Estonian) whereas West and East Votic underwent Ingrian and Finnish influences. East Estonian shares more innovations with North Estonian than with North-East Estonian or Votic. Among the five dialect groups, Coastal and North-East Estonian are the least innovative ones. The existence of the historical sixth group will be discussed in 2.3.5.2.

Concerning the Estonian language, Figure 5 enables us to conclude that the modern Estonian language was formed as a result of long-lasting contacts and integration of dialects representing different ancient Finnic dialect groups. At least beginning with the 18<sup>th</sup> century the integration led to increasing North-Estonianization of other dialects in northern and western Estonia. The second half of the 19<sup>th</sup> century and the first half of the 20<sup>th</sup> century witnessed a development towards to South Estonian and North Estonian bilingualism together with North-Estonianization from the North to the South in south-eastern Estonia. Until the end of the second half of the 20<sup>th</sup> century, most Estonians spoke a levelled form of North Estonian with some reminiscences of former non-North Estonian as purely variational features.

#### 2.3.1. South Estonian

An extensive list of South Estonian differences of North Estonian was published by Andrus Saareste (1952a: 99–103) who also carried out an important study of the northern border area of South Estonian (1952b). Karl Pajusalu has made available important linguistic maps compiled first by Mihkel Toomse for his huge manuscript (30 volumes) on South Estonian

dialects (cf. Toomse 1998). Pajusalu (1999a) also presented detailed lists of South Estonian innovations in the field of consonantism (46 innovations), vocalism (30 innovations), nominal inflection (20 innovations), and verb inflection (20 innovations) and their geographical distribution in terms of parishes. He carefully studied the internal division of South Estonian dialects (Pajusalu 1999b, 2000), mainly on the basis of maps in Saareste 1938–1941 and 1955. South Estonian was earlier spoken also in the northern Latvia that was probably inhabited by South Estonians already before the invasion of predecessors of Latgalls. It is unknown how far to the west the South Estonian speaking population extended. The north-western part of northern Latvia to the north of the rivers Salaca and Seda, which probably made a natural frontier between Estonians and Livonians or Latvians, was emptied during the plagues in the 17<sup>th</sup> century and especially in 1710–1712 and later settled exclusively by Latvians. For geographical reasons the neighbouring area in Estonia has always been sparsely inhabited. The last South Estonian outlier in Latvia in the vicinity of Ilzene in the upper reaches of the river Koiva (Gauja) ceased to exist only in the 1980's.

The westernmost Mulgi dialect of South Estonian has been under the strongest North Estonian influence. First, the Mulgi area has no clear geographical border with North Estonian. Second, while the main body of the South Estonian speaking area belonged in 1224–1561 to Tartu bishopric, the Mulgi area belonged to that part of the lands of the Order of the Knights of the Sword and its successor, the Teutonic Order of Livonia, which only formally was subordinate to the Tartu diocese and was mainly North Estonian. Even if its most influential administrative centre Viljandi was ever situated in the South Estonian area, the area must have become North-Estonianized not later than the first half of the 17<sup>th</sup> century so that North Estonian became the church language and, later, also the school language in the Mulgi area. Third, except the southeasternmost Mulgi parish Helme, the Mulgi area has been effectively separated from the main body of South Estonian by Lake Võrtsjärv.

It may well be the merit of Tartu bishopric and the later Tartu literary language that the Tartu and Võru dialects are more similar to each other than to the Mulgi dialect. Still it is noteworthy that the type of consonant palatalization in the Tartu dialect is identical to that in Mulgi and in Insular and one part of Western North Estonian. Namely, consonants are prepalatalized and only if the former vowel *i* of the following syllable is lost, cf. e.g. *ku<sup>i</sup>l̥* 'hawk' – GSg *ku<sup>l</sup>li* : PSg *ku<sup>l</sup>li*. In Võru South Estonian a consonant or a consonant cluster is palatalized from the beginning to the end, word-finally with a noticeable *j*-coloured offset, cf. *ku<sup>l</sup>* : GSg *ku<sup>l</sup>l̥i* PSg *ku<sup>l</sup>l̥i*. As the main body of North Estonian has a third type of consonant palatalization, the similarity

of consonant palatalization may be considered a hint that earlier the Mulgi and Tartu dialects could have been closer to each other.

As Tartu is situated on the border of south-eastern Estonia in the place where three historical trade routes cross at one of the few and the best fords over the river Emajõgi that is mostly surrounded by fens, it has long been the gate for influences from either side of the river. This is the reason why the Tartu dialect was more influenced by North Estonian than by the Võru dialect. Still the main reason for the deterioration of South Estonian was that after the Northern War the North Estonian literary language little by little overruled the South Estonian literary language in church, school, and public life.

### 2.3.2. East Estonian

East Estonian is spoken to the west and north-west of Lake Peipsi. Its area has bordered on that of North-East, North, and South Estonia. East Estonian shares the greatest number of stems with the vowel *õ* in the initial syllable with North-East Estonian and Votic, the grade alternation of long stressed syllables, or the contrast of so-called quantities 2 and 3 with North and South Estonian. East Estonian varies to a considerable degree depending on its neighbourhood. The northern part shares several features with North-East Estonian (Univere 1986, 1996: 5–15). The southern part, including the south-east of the dialect, Kodavere, belonged to the Tartu bishopric in 1224–1561 and was influenced by South Estonian. Still Kodavere preserved more similarity with Votic than any other part of the dialect and developed several unique innovations. The northern and especially the central part of East Estonian became varieties of North Estonian already in the 19<sup>th</sup> century. North Estonian replaced East Estonian during the 20<sup>th</sup> century.

### 2.3.3. North-East Estonian

North-East Estonian borders on East Estonian in the south and *õ*-less dialects in the west and east. As a result, Lüganuse, especially its northwestern part, had common features with Viru-Nigula, and Central Vaivara had replaced *õ* with *o*. The North-Estonianization of North-East began with North-Estonianization of the parish of Jõhvi that was crossed by important roads. The best-known part of North-East Estonian is Lüganuse. In the literature on Estonian dialectology, North-East Estonian is usually lumped together with Coastal Estonian as the North-Eastern Coastal Estonian dialect (*kirderannikumurre*) and referred in the framework of the latter as the Alutaguse subdialects

(*Alutaguse murrakud*), cf. e.g. Kask 1956, Must 1987: 33–40. The obvious reason for doing so is that neither of them has the grade alternation of long stressed syllables. When compared with East Estonian and Votic, North-East Estonian has no grade alternation of geminate stops after the short vowel of the initial syllable as demonstrated already by Michael Weske (1885: 271–272). The absence of grade alternation of geminates results probably from imperfect imitation of geminates in North Estonian. Imitators were unable to notice the contrast between the weak and strong grade of long stressed syllables, cf. Must 1987: 77. This feature is shared with southern Viru-Nigula, eastern Haljala, and Vaivara Coastal Estonian. Characteristically, North-East Estonian in Central Vaivara had replaced *õ* by the vowel *o*, obviously under the influence of once more prestigious Vaivara Coastal Estonian where *o* is the most usual counterpart of both North-East Estonian and North Estonian *õ*.

#### 2.3.4. Coastal Estonian

Insofar as we know, Coastal Estonian has been spoken on islands and along the southern coast of Gulf of Finland in two areas: (a) on a strip beginning from Jõelähtme, east of Tallinn to Viru-Nigula, and (b) in an enclave in the northern and (north)eastern parts of the parish of Vaivara that borders on the river Narva in the east. The dialect of the first area was identified by the speakers of the dialect and their neighbours as *rannakiel* ‘the coastal language’ as contrasted to *maakeel* ‘the country language’ that is otherwise the oldest common name of both Estonian and Votic. The two areas are separated from each other by the North-East Estonian parishes of Lügánuse and Jõhvi and the western and central parts of Vaivara. Except in Viru-Nigula and Vaivara, Coastal Estonian was spoken at the beginning of the 20<sup>th</sup> century only on islands and in fishing villages. The speech of coastal villages in the parish of Kadrina revealed only traces of Coastal Estonian. Similarly, traces of Coastal Estonian can be found in the inland part of Haljala and in the northern part of Rakvere, first of all the absence of grade alternation of long stressed syllables. The best-known dialect is that of the capes of Kuusalu that belongs to the western part of the area. The eastern part of the main territory, beginning from the Selja coast in Haljala shares several features with North-East Estonian and East Finnish. The most remarkable difference of the western, eastern, and Vaivara Coastal Estonian groups was the use of different first and second person plural endings, respectively *-mme* and *-tte* in the western part and *-mma* ~ *-mmä* and *-tta* ~ *-ttä* in the eastern part of the main body and *-mmo* ~ *-mmö* and *-tto* ~ *-ttö* in East Vaivara. In those parts of Coastal Estonian where vowel harmony was lost (e.g. Selja coast and North

Vaivara) the endings with *ä* and *ö* were not used. As these endings are of certain classificatory value also elsewhere in Finnic, they probably reflect the different origin of each group, and, from the west to the east, also the age of arrival of the groups to Estonia, maybe via the Isthmus of Narva.

On the other hand, unlike all the other Finnic dialects, in Coastal Estonian the change *\*t > s* or rather *\*ti > si* was applied to the imperfect forms of disyllabic *\*a*-stems even with *a* in a long initial syllable, cf. *ans(i)* 'he gave', *kans(i)* 'he carried' (innovation type 6). This was possible because in Coastal Estonian the sequence of the stem vowel *a* and the imperfect marker *\*i* had undergone the contraction *\*ai > \*i* after a long initial syllable in verbs, cf. also the corresponding first person singular forms *annin* 'I gave' and *kannin* 'I carried'. This contraction was characteristic also at least for the North Estonian of northern Virumaa, where the third person singular forms, however, were of the usual North Estonian type, cf. *andis* [*andiz*] and *kandis*. Elsewhere in North Estonian the non-third person singular personal imperfect forms have the secondary imperfect marker *-si-*, cf. *andsin* (< *\*antasin*), *kandsin*; in Votic, Ingrian, Finnish, Karelian, and Veps the sequence *ai* in the second syllable underwent the change *\*ai > \*oi* if the vowel of the first syllable was an illabial one, cf. e.g. Votic *antõ*, Finnish *antoi* 'he gave'. The Coastal Estonian forms *ans(i)* and *kans(i)* can hardly be considered as risen by analogy: the verb 'to give' is more frequent than any other verb with the change *\*ti > si*. Moreover, the contraction *\*ai > \*i* in disyllabic verb stems with *\*a* in the initial syllable has arisen in isolation of the dialects where the change *\*ai > \*oi* took place. In other words, Coastal Estonian existed probably before the changes *\*ai > \*oi* in the second syllable and *\*ti > si* occurred. The seeming contradiction between such an age of Coastal Estonian and the three Coastal Estonian groups with plural personal endings of different origin can be solved proposing that the changes *\*ai > \*i* in the second syllable and *\*ti > si* represent substratum features, and the different personal endings represent adstratum features of different origin in Coastal Estonian.

### 2.3.5. North Estonian

Since 1956, North Estonian has been usually treated as split into insular, western, central, and eastern dialects (Kask 1956). For historical reasons, here East Estonian has been extracted from North Estonian, cf. Viitso 1978. Still even the remaining part of North Estonian is possibly historically more complicated than usually postulated.

### 2.3.5.1. Harjumaa

The northern part of North Estonian is divided into two parts by innovations 22 (\**str* > \**sr* > *hr*) and 23 (\**str* > \**tr*), cf. Figure 5, which because of the limited space does not present the change \**str* > \**sr* for the Finnic *hr*-dialects, and Figure 8. The innovations reflect the simplifications in Finnic of the former cluster \**str* in no more than four borrowed stems. Harjumaa together with the western part of Coastal Estonian shares with West Finnish the cluster *hr* as the reflex of the former cluster \**str* in the stems *kehrä*- 'spin; to spin' and *ohra*. All other Estonian dialects have the reflex *dr* ~ *tr* that is shared with Livonian, Votic, Lower Luga and Hevaha Ingrian, and East Finnish. The two reflexes of \**str* represent two different ways of simplification of the cluster, namely (a) \**str* > \**sr* and (b) \**str* > \**tr*. Thus *hr* was received from \**str* via \**sr*. In addition to *hr*, \**sr* is represented as *sr* in North Karelian and as *zr* in Soikkola Ingrian, South and Aunus Karelian, Lude, and Veps.

The geographical distribution of the reflex \**sr* poses a problem. As all Coastal Estonian dialects are closer to East Finnish than to West Finnish, probably the stems with *hr* in the western Coastal Estonian dialects were received either from Harjumaa North Estonian or West Finnish as a substitute for equivalents with \**tr*. Still it is unknown whether (1) the *hr* area in Estonia rose as influenced by West Finnish, cf. Figures 2 and 3, or (2) Estonia is the homeland of the predecessors of West Finns, or (3) Harjumaa Estonian and West Finnish represent two westernmost reminiscences of a former solid \**sr* area that was split into at least four parts by the arrival of \**tr* tribes to Estonia and Finland via the Isthmus of Narva and the Isthmus of Karelia. Further, it is possible that some North Estonian or North-Estonianized dialects replaced the former stems with \**hr* or \**sr* by cognate stems with \**tr*.

### 2.3.5.2. Insular dialects

The insular dialects in the western and central Saaremaa and Hiiumaa have characteristic developments of the vowel *e*. First, in western and central Saaremaa and Hiiumaa \**e* was lost. In central Saaremaa and western Hiiumaa, both the short and long \**e* merged with *ö*. The same development occurs locally even on the western coast of the mainland. In western Saaremaa and eastern Hiiumaa, however, only the short \**e* merged with *ö*, the long \**ē* shifted to *õ*. Obviously these changes took place only after vowel harmony had disappeared. The shift \**ē* > *õ* was probably an indigenous development whose main reason was the fact that for Estonian children *ē* is the vowel

most difficult to master. In addition, in the 1930s Paul Ariste observed that in the pronunciation of the oldest speakers in eastern Hiiumaa and western Saaremaa the long vowel *\*ā* was usually rounded to *ā̃* or *ā̄*. Hence, in eastern Hiiumaa and western Saaremaa Insular Estonian the usual North Estonian and Votic asymmetric 3 + 4 + 2 vowel system was replaced or at least was being replaced by a symmetric 3 + 3 + 3 vowel system:

<i>ū</i>	<i>ū̃</i>	<i>ī</i>		<i>ū</i>	<i>ū̃</i>	<i>ī</i>
<i>ō</i>	<i>ē̃</i>	<i>ō̃</i>	<i>ē̄</i>	<i>ō</i>	<i>ō̃</i>	<i>ē̄</i>
<i>ā</i>		<i>ā̃</i>		<i>ā̃</i>	<i>ā̄</i>	<i>ā̄</i>

Even more problematic is the reason for the general merger of *\*ē*, both short and long, into *\*ō* in central Saaremaa and western Hiiumaa. This merger has been considered a Swedish influence (Ariste 1931: 77, Tauli 1956: 199–200).

As Estonian Swedish (except in Naissaar in the Gulf of Finland) had no labial front vowels and, what is especially important, never developed an *ö*, the substitution of *ō* for *\*ē* should better be attributed to mispronunciation of the vowel *ē*. As that kind of mispronunciation is also characteristic of Estonian children before they acquire the correct pronunciation, the claimed Swedish influence is extremely problematic. Moreover, a typologically similar development occurred in West Livonian where *\*ē* was first raised as elsewhere in Livonian, cf. *\*ē* > *\*ē̄*, and then merged into the rounded front vowel *ū̄*. On the other hand, there exists the possibility that for long vowels the long *ō̄* as the reflex of the earlier *\*ē̄* does not result directly from the merger of *\*ē̄* into *ō̄* but rather from the merger *\*ā̄* > *ō̄*. Because of the low functional load of *\*ō̄*, and especially of *\*ō̄̃*, the replacement of the back vowel *\*ē* added synonymy only in a few cases. Note that in central Saaremaa and western Hiiumaa the Proto-Finnic vowel system was restored. At the same time the rate of stems with the vowel *ō* increased on the account of vowels *\*e* and *\*o*, *\*a* and *\*u*, which were the sources of the previous *\*ē*.

The most important characteristic feature of most insular dialects is the occurrence of the vowel *o* instead of the expected *ō* in a series of words as a counterpart of the vowel *\*ē* that is usually present in North Estonian and in Chudic dialects and in the case of Insular Estonian *oi* and *ou*, also in South Estonian and even in Livonian, e.g. *joi* 'he drank', *'louna* 'south', *'poud* 'drought' vs. North and South Estonian *jōi*, *'lōuna*, *pōud*, Livonian *juoi*, *'lōōnag* 'south-east', *pōōda* PSg *pōūdō*, cf. also Ariste 1939: 37, 125–126, Pall 1987: 410–411 and 406. As *\*ē* in such words in North Estonian comes mostly from an earlier *\*o*, it is meaningful to suppose that those insular dialects have never had the vowel *\*ē* in such cases. If it is true, then the Finnic dialects must be classified into six groups on the basis of the occurrence or

absence of \**e*, namely into Neva (without \**e*), Livonian, South Estonian, Insular Estonian, North Estonian, and Chudic). As sometimes *o* can be locally found in such words even on the coast of the West Estonian mainland (Hanila, Karuse, Lihula), it is not clear whether Insular Estonian represents only a reminiscence of a North-Estonianized broader independent dialect area that existed at the time of the rise and spread of the vowel \**e*, or the stems with *o* instead of *õ* reached mainland by contacts or with settlers from the western islands.

Even if the cases of *o* instead of *õ* in the West Estonian mainland are archaisms, the insular dialects form two dialect areas, cf. Figure 6, where the approximate dialect boundary between Insular Estonian and Straits Estonian is represented by different developments of the sequence \**aia* as in *saja* vs. *saa* (from \**saian* ‘hundred (GSg)’) or *sajab* vs. \**saab* ‘it rains’, cf. Saareste 1955a, Maps 103 and 104. *aa* from \**aia* represents a new long *aa* in Straits Estonian as the original long \**ā* was broken into *ua*, cf. Figure 14, and nominative forms ending in a cluster WEAK STOP + SYLLABIC RESONANT, cf. Figure 17, make the core area of Straits Estonian different from the surrounding dialects. Although Straits Estonian has no strict boundary, the boundaries of characteristic innovations of Straits Estonian and the border of the change \**e* > *ö* in Saaremaa remain within a strip of 20 kilometres.

### 2.3.5.3. Mainland dialects

Except the border of Harjumaa, the mainland part of North Estonian has no sharp internal borders. There are some northern innovations that either follow the south-western and southern borders of historical Harjumaa, Järvamaa, and Virumaa or extend somewhat farther, e.g. breaking of long mid vowels (cf. Figure 12 and Saareste 1955a, Map 95, Must and Univere 2002, Map 26), \**rs* > *rss* in feet of Q3 (\**varsi* > \**vars* > *varss* ‘stalk, stem; handle’). Similarly, there are some southern features that extend approximately to the northern border of Viljandimaa and Tartumaa, e.g. \**tk* > *kk*, \**ks* > *ss* (\**ühťeksän* > *ühessa* ‘nine’), cf. Must and Univere 2002, Map 27.

On the other hand, there are no southern innovations characteristic of both Pärnumaa and Läänemaa. North Estonian (both together with and without Insular Estonian and Harjumaa) seems to consist of two parts: the northern part (innovation 31, i.e. the palatalization of dental consonants in \**i*-stems both before a lost and preserved *i* of the second syllable, cf. also Figure 18) and the western part (innovation 32, i.e. the vocalization and loss of the first person singular suffix \*-*n*, shared with South Estonian, Livonian, and East Votic). Still it is unclear to which extent the loss of the first person

singular suffix *\*-n* within the framework of a general trend to vocalize the final *\*n* took place independently in different dialects.

### 3. Main trends in the phonetic and/or phonological development of Estonian

Depending on the heterogeneity of the Estonian dialects, several tendencies in the development of the Estonian language have common preconditions or even common origin with similar tendencies in some other Finnic dialects. The phonological tendencies of Estonian were described in detail in Tauli 1956 and the role of essential phonological and morphological changes in South and North Estonian last in Rätsep 1989.

#### 3.1. Stress

Differently from Livonian and Finnish, Estonian has accepted non-initial stress in many borrowings. The first note about non-initial stress from the middle of 17<sup>th</sup> century concerned borrowed Christian names. Still it is possible that some interjections had non-initial stress already earlier and independently of the non-initial stress in loanwords.

In North Setu contraction of the main verb and the postponed auxiliary negation verb created paradigmatic negation forms with main stress on a non-initial syllable: *an`naiq* [*anna-i?*] ‘don’t give’, *an`nass* ‘he did not give’

Although a number of borrowings and some interjections have primary stress on a non-initial syllable, there is a general tendency towards trochaic stress patterning in polysyllabic words, and towards dactylic word-final feet if the trochaic patterning cannot be applied. As a rule, secondary stresses are usually on odd syllables counting from the stressed syllable: *vastanda-tavatelegi* [*va:štanda:řtava:řtele:gi*] ‘even to ones being opposed’, *arenesime* [*a:rene:zime*] ‘we developed’ This tendency is counteracted by some derivational affixes that attract secondary stress: *arenemise* [*a:renemi:ze*] ‘of development (GSg)’ In addition, there exist traits of an older rule according to which in a pentasyllabic or longer word with a short third and a long fourth syllable, the long fourth syllable receives secondary stress: *arvata`vasti* ‘presumably’, in Virumaa sometimes *põleta`vate* ‘of burning (transitive) ones (GPI)’ and *põleta`valle* (AllSg) instead of modern *põle`tavate* and *põle`tavale*. In Tartu and Võru South Estonian the distribution of secondary stresses largely depends on syllable length, cf. 3.2.

### 3.2. Syllabic quantity

In the 20<sup>th</sup> century all Estonian dialects distinguished between short and long vowels and short and long consonants. Short and long vowels were distinguished already in Proto-Finnic. The distinction between short and long consonants arose as a consequence of vowel apocope and syncope after the 13<sup>th</sup> century. After the loss of syllabic vowels in open unstressed syllables, the former prevocalic geminate consonants in their new word-final or pre-consonantal positions were reinterpreted as long consonants and contrasted to the corresponding short consonants. In Coastal and North-East Estonian, this development occurred considerably later than elsewhere as in the 20<sup>th</sup> century vowel apocope in disyllabic words with a long first syllable was not accomplished and vowel syncope had not begun.

The contrast between light and heavy stressed syllables in dialects other than Coastal and North-East Estonian arose on the basis of a tendency towards disyllabic feet isochrony. Long stressed syllables were shorter or lighter before closed unstressed syllables and longer or heavier before open unstressed syllables. When perceived, this polarization became a norm for all stressed syllables, i.e. of syllabic accentuation. After apocope and syncope, the occurrence of light and heavy long syllables did not depend any more on the structure of the following unstressed syllables. This and the growth of the number of heavy monosyllabic words made the contrast of heavy and light syllables a fundamental contrast. Even the later loss of word-final consonants *\*k*, *\*h*, *\*n* and several other changes diminished general redundancy in words and added to the importance of syllabic accentuation both in the field of phonology and morphology.

Because of local or sporadic accent shifts, the usage of Q2 and Q3 with different words or word forms is not uniform. For example, in North Estonian, except in southern Läänemaa and Pärnumaa, there was an accent shift /' / > /' / in the infinitive and gerund forms of verbs with a monosyllabic stem (*'saada* > *saada* 'to get', *'juua* > *juua* 'to drink', *'tulla* > *tulla* 'to come', *saades* > *saades* 'getting', *juues* > *juues* 'drinking', *tulles* > *tulles* 'coming'); the historically older form being substandard. The historically older type of Q2 is common also in South Estonian, cf. Figure 10. On the other hand, in southern Läänemaa and Pärnumaa, as well as in most of South Estonian, by analogy with forms such as *saada* and *saades*, the infinitive and gerund forms of disyllabic *a*-stems ending in *-da* substituted Q2 for Q3 (*'anda* > *anda* 'to give', *andes* > *andes* 'giving').

The traditional grammars of Standard Estonian, for pedagogical reasons, claim that all derivational suffixes ending in the nominative singular in *-ik*, depend on the case form either of Q3 or Q2 and, hence, have a secondary

stress (*'kunst`nik`artist*'), GSg *'kunst`niku*, PSg *'kunst`nikku*; *'ava`lik`public*', GSg *ava`liku*, PSg *ava`likku*), except where preceded by an initial syllable of Q2 (cf. *poolik`half-full; incomplete*', GSg *pooliku*, PSg *poolikut*). Actually, this scheme is still more or less adequate for Võru and the neighbouring Tartu South Estonian. In addition, in Võru and Tartu South Estonian, a syllable of Q3 can be followed only by one unstressed syllable. In a trisyllabic syllable followed by two syllables, the second syllable usually carries a secondary stress (*'tar`kuse* [*ta·rkku:ze*] 'wisdom (GSg)'). As in South Estonian, the former vowels of the second syllable were systematically syncopated, the present second syllables after a syllable of Q3 usually retain their pre-syncopal automatic secondary stress (*'tap`jalõ < \*ta·ppaja:llen* 'killer (AllSg)') or suffixal stress (*'jää`mine`remaining (the action noun)'*). In North Estonian, a syllable of Q3 can be followed by two unstressed syllables (*'võitlen`I fight*', *'võitleja`fighter*') or by a non-final syllable of Q3 (*'kunst`nikku`artist (PSg)'*, GPI *'kunst`nikkude*). In addition to monosyllables of Q3, a final syllable can be of Q3 in a quadrisyllabic word (*'algaja`lik`characteristic of a beginner*') and, depending on the speaker, also in a trisyllabic word (*'ava`lik`public*').

### 3.3. Gradation

In the historical grammar of Finnic languages two main types of gradation are distinguished. The so-called RADICAL GRADATION is connected first of all with weakening or strengthening in the stressed syllables or at the boundary of a stressed and the following unstressed syllable, cf. 3.3.1. The so-called SUFFIXAL GRADATION captures intervocalic single stop weakening after an unstressed syllable, cf. 3.3.2. From the historical point of view, gradation is primarily a set of weakenings and only secondarily a set of strengthenings.

#### 3.3.1. Radical gradation

The rise of gradation in Finnic dialects is a function of the tendency towards disyllabic feet isochrony. Depending on the openness vs. closeness of an unstressed syllable, the preceding long syllable or the initial stop of the unstressed syllable was weakened before a closed syllable. The weakening of long primarily stressed syllables before closed unstressed syllables has been measured in Finnish and Aunus Karelian, but only de-gemination of geminate stops and affricates and weakening and mutation of single stops has been perceived and accepted as a regular process. Only in Livonian and in

most Estonian dialects (Coastal and North-East Estonian are excluded) it led to a contrast of long stressed syllables. This morphophonological process is active although the closeness and openness of syllables is no longer the conditioning factor of the process.

There exist several theories of the rise of contrast between Q2 and Q3 in long stressed syllables.

The theory of Michael Weske (1873: 7–8), later modified by Björn Collinder (1929: 19), explains the rise of Q3 as stress strengthening and segment lengthening in the first syllable, caused by the loss of the following syllable either because of contraction or vowel loss. Karl Bernhard Wiklund (1891: 22–23) supposed that weakening in Lapp and Finnic was caused by stress on the second syllable and connected stress with the closeness of the second syllable.

Eemil Nestor Setälä (1896) explained the weak grade of long syllables as a result of weakening caused by the following closed syllable. In fact, Setälä generalized to long syllables the explanation given by Matthias Alexander Castrén to the Lappic and Finnic weakening of stops in the framework of gradation. As Setälä dated the rise of gradation back to Proto-Finno-Ugric, his theory was rejected because there is no gradation in other Finno-Ugric languages except Lappic and Finnic, and even some Lappic and Finnic dialects have no traits of gradation. (However, there is gradation in Nganasan and in Ket Selkup.)

As Weske's theory was unable to explain the syncope and apocope of vowels in post-tonic open syllables, Paul Ariste (1939: 145–146, cf. also 1947a: 5–9) explained the shortening, reduction and loss of the vowel in the second syllable as caused by lengthening in the first syllable. According to Ariste, the quantity contrast of long first syllables was caused by the analogy of geminate stop alternation such as in the nominative and genitive forms of the stem for 'bushel', cf. *\*vakka* : *\*vaĳkan*, where the geminate stop was shortened before a closed second syllable. Further, in order to elicit the contrast, the longer first syllables were lengthened before a short second syllable, and the vowel of the second syllable shortened: *\*vakka* 'bushel', *\*laùlu* 'song', *\*sāri* 'island', and the vowel of the second syllable was lengthened after a shorter first syllable *\*vaĳkàn* 'bushel', *\*laùlùn* 'song', *\*sārèn* 'island'

Valter Tauli (1947, 1954: 6–8) stated, contrary to Ariste, that the reduction or total loss of a vowel in the second syllable can occur without lengthening of the first syllable, e.g. in Veps. In principle, he accepts Setälä's explanation of the role of closed second syllables for the first syllables emphasizing that the tendency to shorten first syllables before closed second syllables is older than the alternation of Q2 and Q3 in Estonian. According to

Jussi Laurosela's measurements, even in present-day Finnish the first component of a consonant cluster in a disyllabic word is shorter if the second syllable is closed than if it is open. According to Tauli, the roots of the Estonian alternation are in such phonetic alternations, and the loss of the genitive ending *-n* favoured the rise of a phonemic quantity distinction in Estonian and Livonian.

The Votic data, however, show that the loss of final *\*-n* was actually at first a vocalization of *\*-n* as it is represented as a lengthening of the preceding short vowel in words having at least two syllables. Similarly, the loss of *\*n* in the cluster *\*ns* resulted in the lengthening of the preceding vowel in Livonian, Estonian and Votic. The lengthened final vowel caused gemination of the preceding intervocalic single consonant after a short monophthong of a stressed syllable in Pontizõõ, Orko, and East Votic but not in Vaipooli Votic where single consonants are nevertheless geminated after a short monophthong before a long vowel or a diphthong, for example, in partitive and illative forms (Viitso 1964). Note that such a gemination results in the rise of long syllables instead of the former short ones. Hence, it is hard to ascribe any role in the rise of the phonemic quantity distinction to the loss of final *\*-n* in Estonian. Moreover, it is possible that Tauli did not notice the vocalization stage in the history of syllables with final *\*-n*. In principle, the loss of final *\*-k* and *\*-h* were a better argument for an explanation of the rise of the phonemic quantity distinction in Tauli's style. Unfortunately, it is unclear whether *\*-k* and *\*-h* were finally lost before or after the loss of *\*-n*. Notwithstanding the Livonian type of gradation, there are no other known phonetic preconditions for the rise of quantity correlation of long syllables than the phonetic alternation of first syllables depending on the openness vs. closedness of the following unstressed syllable in Finnish (cf. Laurosela 1922: 232, Leskinen, Lehtonen 1985) and Aunus Karelian (cf. Donner 1912: 36). In order to develop into a morphophonological gradation, this automatic alternation needed only to be perceived. Only a perceived alternation could be accepted as a linguistic norm and subjected to further polarization and reinterpretation of sound patterns caused by openness vs. closedness of the second syllable of a foot as a function of syllabic accentuation in initial syllables. Reinterpretation of sound patterns as functions of different syllabic accents made it possible to increase the duration of the vowel of an unstressed syllable for further polarization of syllabic accents without triggering phonetic processes to counterbalance the lengthening.

This polarization as a norm caused the quantity alternation of stems in their morphological paradigms so that the stressed syllable was longer before an open syllable and shorter before a closed syllable. This quantity alternation was retained, in principle, also after the former conditioning environ-

ments changed. The quantity alternation of long stressed syllables has been considered a special type of grade alternation or gradation and called QUANTITY ALTERNATION (*vältevaheldus*) in traditional grammar of the Estonian language.

There are, in addition to such a syllabic quantity alternation, two more types of morphophonological alternation caused by the former openness vs. closedness of post-tonic syllables, namely (a) single stop weakening that at its present stage could better be characterized as stop mutation and (b) geminate stop weakening. In Finnic linguistics, these two types of alternation have been usually called SINGLE STOP GRADATION and GEMINATE STOP GRADATION. In grammars of the Estonian language the single stop mutation is referred to as QUALITY ALTERNATION (*laadivaheldus*). The latter term owes its rise to the fact that in Standard Estonian in a certain nominal type, the original quality alternation of the single stop *\*t* is now conceived as quality of *s* because of assimilation of *\*t* before *\*i* and some other changes of the stop in other positions, cf. Table 5.

**Table 5.** The disguise of quality alternation of *\*t* as the alternation of *\*s*:  
*\*käti* 'hand' and *\*künti* 'nail, claw'

	Underlying form	Modern form	Underlying form	Modern form
NSg	<i>*käti</i> > <i>*käsi</i>	<i>käsi</i>	<i>*künti</i> > <i>*künsi</i>	<i>'küüs</i>
GSg	<i>*käte/n</i> > <i>*käte/n</i>	<i>'käte</i>	<i>*künte/n</i> > <i>*künte/n</i> > <i>*künte/n</i>	<i>'küüne</i>
PSg	<i>*kät/tä</i>	<i>'kät/tä</i>	<i>*künt/tä</i>	<i>'küün/tä</i>
IIISg	<i>*käte/hen</i>	<i>'kätte</i>	<i>*künte/hen</i>	<i>'küün/de</i>
GPI	<i>*kät/ten</i> > <i>*kät/ten</i>	<i>'käte</i>	<i>*künt/ten</i> > <i>*künt/ten</i>	<i>'küün/te</i>

Geminate stop gradation is the most widespread type of gradation in Finnic being absent only in most Veps dialects. Except in Livonian, North and East Estonian, Lude, and Veps, geminate stop gradation had been generalized even to geminates following the vowel of an unstressed syllable (*\*oppettan* > *\*õppettan* > *\*õppeitan* 'I teach'). In Estonian, except Coastal and North-East Estonian, the geminate stop weakening is largely a part of quantity alternation. Usually it is believed that the Estonian quantity alternation arose as the generalization of the pattern of geminate stop gradation to all stressed syllables. And yet even the opposite is possible: geminate stop gradation in Finnic dialects, except North, East and South Estonian, may be preserved from an otherwise general de-phonologization of the former quantity alternation of long syllables because all weakened geminate stops had already become short single stops in these dialects (*\*õppettaja* > *õpettaja* 'teacher',

*\*õppeitan* > *opetan* 'I teach', cf. also the corresponding western Coastal Estonian words *obetaja* and *obedan*, written according to the principles of Estonian orthography). South Estonian witnessed the de-gemination of weakened geminate stops, with local exceptions, after non-initial syllables. In North and East Estonian weakened geminate stops became short single stops only where preceded by a resonant consonant, diphthong or a long monophthong (*\*karttan* > *\*karitan* > *'kardan* 'I fear', *\*peittän* > *\*peiitän* > *peidan* 'I hide', *\*sāttan* > *\*sāitan* > *saadan* 'I send'). The exceptional occurrence of the geminate [ʃt] in that position in the disyllabic genitive plural and the second person plural forms of Q2, cf. *'küünte* in Table 5, has the aim to give prominence to the corresponding inflectional suffix *-te*.

### 3.3.1.1. Quality alternation

Although the general pattern of quality alternation is simple, cf. Table 6, in many cases there are no formal criteria for deciding whether a word undergoes the alternation or not because quality alternation in Estonian is to a great extent lexicalized, cf. e.g. *rada* 'path' : *raja*, *'koda* 'entrance hall; chamber' : *'koja* vs. *'kada* 'slingshot' : *'kada*, *oda* 'spear' : *oda*.

In some cases there exist clear restrictions to quality alternation. In an *i*-stem a stop is never weakened (a) if intervocalic and preceded by a short monophthong or (b) if occurring in a consonant cluster different from *ht*, *hk*, *lb* and *rb*. Many *i*-stems that undergo quality alternation are borrowings. There are no good examples of quality alternation in original *u*-stems with a single stop preceded by a short monophthong. Even in those cases where Finnish has an *u*-stem, the Estonian weak-grade forms give an evidence of the stem vowel *\*o*, e.g. *sugu* 'kin; sex' : *soo*, cf. Finnish *suku* : *suvun*. Many former gradational stems reveal no traces of the former quality alternation of single stops because paradigmatic levelling has eliminated or prevented too complicated stem variation within inflectional paradigms, cf. e.g. the modern nominative, genitive, and partitive singular forms *pide* 'handle' : *pideme* : *pidet* and *okas* 'thorn' : *okka* : *okast* instead of theoretically expected regular forms †*'pee* : *pideme* : †*'peet* and †*oas* : *'okka* : †*oast* where the final *-t* is the partitive ending.

The development of weakened stops is neither uniform in different dialects nor uniformly understood by different authors. It is possible to dispute whether the weakened stop in the case of alternations such as *raud* : *raua* and *siig* : *siia* in Table 6 is really lost or not. The traditional phonetic transcription of words of the type, cf. [*rauð* : *rauwa*] and [*sîg* : *sîjâ*] implies the presence of segments [w] and [j] in such weak-grade forms. There is no in-

strumental proof of such segments. On the other hand, the transcription is in conformity with the linguistically trained native speakers' impression that the second syllable begins in an *u*- or *i*-like non-syllabic segment. As there is otherwise no need for the phoneme /w/, [w] and [j] after *uu*, *ii*, and diphthongs ending in *u* and *i* can be considered as automatic non-syllabic continuations of *u* and *i* in syllables not beginning in a consonantal onset. On the other hand, there exist dialects where the corresponding forms *rauua*, *rauvva*, *ravva* have an obvious consonantal onset.

**Table 6.** Quality alternation of single stops

Underlying alternation	Modern alternation	Example (NSg : GSg)		Gloss
* <i>p</i> : * <i>p̃</i>	<i>b</i> : Ø	* <i>kūpi</i> : * <i>kūpēn</i>	* <i>kuub</i> : * <i>kuue</i>	'jacket'
		* <i>upa</i> : * <i>uṗan</i>	* <i>uba</i> : * <i>oa</i>	'bean'
	<i>b</i> : <i>v</i>	* <i>hāpa</i> : * <i>hāṗan</i>	* <i>haab</i> : * <i>haava</i>	'aspen'
* <i>lp</i> : * <i>lṗ</i>	<i>lb</i> : <i>lv</i>	* <i>halpa</i> : * <i>halṗan</i>	* <i>halb</i> : * <i>halva</i>	'bad'
* <i>rp</i> : * <i>rṗ</i>	<i>rb</i> : <i>rv</i>	* <i>kurpa</i> : * <i>kurṗan</i>	* <i>kurb</i> : * <i>kurva</i>	'sad'
* <i>mp</i> : * <i>mṗ</i>	<i>mm</i> : <i>mm</i>	* <i>kumpi</i> : * <i>kumṗan</i>	* <i>kumb</i> : * <i>kumma</i>	'which of the two'
* <i>t</i> : * <i>t̃</i>	<i>d</i> : Ø	* <i>rauta</i> : * <i>rauṭan</i>	* <i>raud</i> : * <i>raua</i>	'iron'
		* <i>jouto</i> : * <i>jouṭon</i>	* <i>jōud</i> : * <i>jōu</i>	'force, power'
		* <i>ito</i> : * <i>iṭon</i>	* <i>idu</i> : * <i>eo</i>	'germ'
	<i>d</i> : <i>j</i>	* <i>sata</i> : * <i>saṭan</i>	* <i>sada</i> : * <i>saja</i>	'hundred'
* <i>nt</i> : * <i>nṭ</i>	<i>nd</i> : <i>nn</i>	* <i>kanta</i> : * <i>kanṭan</i>	* <i>kand</i> : * <i>kanna</i>	'heel'
	<i>nd</i> : <i>n</i>	* <i>sūnta</i> : * <i>sūnṭan</i>	* <i>suund</i> : * <i>suuna</i>	'direction'
* <i>lt</i> : * <i>lṭ</i>	<i>ld</i> : <i>ll</i>	* <i>kulta</i> : * <i>kuḷṭan</i>	* <i>kuld</i> : * <i>kulla</i>	'gold'
	<i>ld</i> : <i>l</i>	* <i>kēlto</i> : * <i>kēḷṭon</i>	* <i>keeld</i> : * <i>keelu</i>	'prohibition'
* <i>rt</i> : * <i>rṭ</i>	<i>rd</i> : <i>rr</i>	* <i>kerta</i> : * <i>kerṭan</i>	* <i>kord</i> : * <i>korra</i>	'order'
	<i>rd</i> : <i>r</i>	* <i>kēрто</i> : * <i>kēṛton</i>	* <i>keerd</i> : * <i>keeru</i>	'coil'
* <i>ht</i> : * <i>hṭ</i>	<i>ht</i> : <i>h</i>	* <i>kohta</i> : * <i>kohṭan</i>	* <i>koht</i> : * <i>koha</i>	'place'
* <i>k</i> : * <i>k̃</i>	<i>g</i> : Ø	* <i>sika</i> : * <i>siḱan</i>	* <i>siig</i> : * <i>siia</i>	'whitefish'
		* <i>rōko</i> : * <i>rōḱon</i>	* <i>roog</i> : * <i>roo</i>	'reed'
		* <i>vako</i> : * <i>vaḱon</i>	* <i>vagu</i> : * <i>vao</i>	'furrow'
* <i>lk</i> : * <i>lḱ</i>	<i>lg</i> : <i>lj</i>	* <i>selkä</i> : * <i>selḱän</i>	* <i>selg</i> : * <i>selja</i>	'back'
	<i>lg</i> : <i>l</i>	* <i>velka</i> : * <i>velḱan</i>	* <i>vōlg</i> : * <i>vōla</i>	'debt'
* <i>rk</i> : * <i>rḱ</i>	<i>rg</i> : <i>rj</i>	* <i>kärki</i> : * <i>kärḱen</i>	* <i>kärg</i> : * <i>kärje</i>	'honeycomb'
	<i>rg</i> : <i>r</i>	* <i>arka</i> : * <i>arḱan</i>	* <i>arg</i> : * <i>ara</i>	'timid'
* <i>sk</i> : * <i>sḱ</i>	<i>sk</i> : <i>s</i>	* <i>vaski</i> : * <i>vasḱen</i>	* <i>vask</i> : * <i>vase</i>	'copper'
* <i>hk</i> : * <i>hḱ</i>	<i>hk</i> : <i>h</i>	* <i>nahka</i> : * <i>nahḱan</i>	* <i>nahk</i> : * <i>naha</i>	'skin; leather'

**Table 7.** Development of weakened stops  
between a long mid labial vowel and \**A* or \**e*

	Pre-North Estonian	Standard Estonian	Gloss
* <i>p</i> > * <i>v</i>	* <i>tōpat</i> > * <i>tōvat</i>	<i>toovad</i> [tōvad]	'they bring'
	* <i>lōpāt</i> > * <i>lōvāt</i>	<i>löövad</i> [lōvad]	'they hit'
	* <i>lōpek</i> > * <i>lōvek</i>	<i>lööve</i> [lōve]	'rash'
* <i>i</i> > * <i>w</i>	* <i>tōtak</i> > * <i>tōwak</i> > * <i>tūwak</i>	<i>tuua</i> [tūwa]	'to bring'
	* <i>lōtāk</i> > * <i>lōwāk</i> > * <i>lūwāk</i>	<i>lūüa</i> [lūija]	'to hit'
	* <i>tōtesna</i> > * <i>tōwesna</i> > * <i>tōwesna</i>	<i>tuues</i> [tūwez]	'while bringing'
	* <i>lōtek</i> > * <i>lō<sub>ɕ</sub>ek</i> > * <i>lo<sub>ɕ</sub>ek</i>	<i>loe</i> [loē]	'north-west'
* <i>k</i> > Ø	* <i>rōkat</i> > * <i>rō<sub>ɕ</sub>at</i> > * <i>ro<sub>ɕ</sub>at</i>	<i>road</i> [roaɒ]	'dishes'

Independently of how to explain the role of the segments [w] and [j] after long high vowels and diphthongs ending in *u* and *i*, the rise of long labial mid vowel raising before the weakened \**t̃* presupposes the change \**t̃* > \**w* at least in stems with a long back labial vowel of the initial syllable in all Estonian and West Votic dialects, cf. the development from \**tōtak* to *tuua* 'to bring' in Table 7 and 3.4.1.1. Before \**A*, i.e. before \**a* and \**ä*, the change \**t̃* > \**w* owes its rise to the assimilative influence of the preceding labial vowels. Before \**e*, \**t̃* was usually lost, the loss triggered contraction of the first two syllables in a word and shortening of the long vowel without the raising of the long vowel. Gerunds behave as having undergone the change \**t̃* > \**w*. In reality, probably, gerunds were derived from infinitives by substituting the gerund formative for the infinitive marker. Probably the change \**t̃* > \**w* once occurred also after \**ō* and \**ū*, e.g. in Standard Estonian *süüa* [süija] 'to eat' and *hüüab* [(h)üijab] 'he shouts' where the diphthong in modern pronunciation results from the breaking of the long monophthong \**ū*, which developed from an earlier \**ō* according to the scheme \**sōtāk* > \**sōwāk* > \**sūwāk*. In Tartu and Võru South Estonian the sequences of a long monophthong (*V̄*) and a semivowel (*W*) from \**t̃* underwent the change \**V̄WA* > *VWWA* where *W* is *v* or *j*, cf. *juvvaq* 'to drink', *süvväq* 'to eat'. Obviously also such forms as *saiaq* 'to get' and *kiiäq* 'to boil (iv)' from monosyllabic stems \**sā-* and \**kē-* (cf. 3Sg *saase* 'he gets' and *keese* 'it boils'), underwent the same change, i.e. \**sājak* > *sajjaq* and \**kījāk* > *kijjäq* where *j* results from the change \**t̃* > \**j* after a long illabial vowel and \**i* in \**kījāk* results from assimilative raising \**ē* > \**i* triggered by \**j*. \**t̃* > \**j* triggered a similar raising of the long mid vowel \**ē* also in Insular and Western North Estonian, cf. *kiia* 'to boil (iv)', 3Sg *keeb*, where the infinitive form is secondarily of Q3. There is no evidence of \**V̄WA* > *VWWA* in Insular and Western North Estonian but only of the stage \**V̄WA*, cf. *juuva* 'to drink (Inf)' in Figure 11.

The former occurrence of intervocalic single stop gradation after a secondarily stressed syllable in North Estonian is problematic as there is no evidence of weakening of *\*t* and *\*k* in this position, cf. also Kettunen 1962: 66–67 and 57. The exceptionless occurrence of *v* as the reflex of the intervocalic *\*p* in the present participle markers and the third person plural formatives can be considered as an argument for the former gradation. Still it may rather result from a generalization of the corresponding formatives, cf. 8.1.3.

### 3.3.2. Suffixal gradation

In Finnic, except Livonian, Lude and Veps, intervocalic single stops after an unstressed syllable underwent a weakening called SUFFIXAL GRADATION. As a rule, the weakened stops either merged into semivowels (*\*kataka* ‘juniper’ > *\*kataķa* > Vaivara *kadaja*, Tarvastu Mulgi ‘*kadai*’ GSg ‘*kadaja*, Tartu and Võru ‘*katai*’: GSg ‘*kadaja*) or, mostly, were lost in modern languages. The weakening and loss of weakened stops was followed by vowel assimilation and contraction: (*\*kattek* ‘cover’: ) GSg *\*katteken* > *\*katteķen* > *\*kattēn* > ‘*katte*, (*\*neittsūt* ‘virgin’: ) NPl *\*neittsütet* > *\*neittsūtet* > *\*neittsü,et* > *neitsid*, *\*kerketä* ‘easy; light’ > *\*kerkeĩä* > *kerke,ä* > *\*kerkē* > ‘*kerge*, (*\*seinä* ‘wall’: ) PSg *\*seinätä* > *\*seinäĩä* > *\*seinā* > *seina*, *\*korjatan* ‘I gather’ > *\*korjaĩan* > *\*korjān* > ‘*korjan*, *\*antatak* ‘to give’ > *\*antaĩak* > *\*antāk* > *anda*. On the other hand, as the further weakened stop loss often would have caused transparency loss in inflectional paradigms, preventive analogical changes have been applied: the single stop was restored after an unstressed syllable (e.g. in imperative and jussive suffixes, cf. ‘*kadugu* ‘to be lost (Jus)’ for *\*katokohen* > †*kadu*), replaced by the corresponding geminate, cf. ‘*kadakas* for *\*kataķa* > †*kada*, or the suffix was replaced by an innovational suffix.

North Estonian, including Standard Estonian, exhibits no traits of suffixal gradation of the stop *\*t* at the beginning of a closed syllable in words of Q1 (*\*keväten* ‘spring (GSg)’ > ‘*kevade*, *\*elätäk* ‘to live (Inf)’ > *elada*, *\*vikaten* ‘mistakes (GPL)’ > *vigade*), cf. Ariste 1956: 15. In a group of adjectives and nouns, the different behaviour of *\*t* at the beginning of open and closed syllables caused a specific type of stem alternation, cf. *\*pimetä* > *\*pimeĩä* > *pimeä* > ‘*pime* ‘blind; dark’ vs. NPl *\*pimetät* > *pimedad*. Later the genitive stem was generalized to all non-nominative singular forms with the open third syllable.

### 3.3.3. Weakening, strengthening, and disguised gradation

According to the Estonian grammatical tradition, gradational stems are divided into WEAKENING and STRENGTHENING stems on the basis of the distribution of strong and weak grade forms in the partitive singular versus the genitive singular for nominals and supine illative versus the first person singular of the present indicative / infinitive as principal forms. The corresponding two types of gradation cover all types of radical gradation, cf. Table 8.

**Table 8.** Weakening and strengthening gradation

WEAKENING GRADATION					
Partitive	Genitive	Gloss	Infinitive	Present 1Sg	Gloss
<i>liitu</i> < * <i>liitoõa</i>	<i>liidu</i> < * <i>liiton</i>	'union'	<i>liita</i> < <i>liitääk</i>	<i>liidan</i> < * <i>liitän</i>	'to add'
<i>kadu</i> < * <i>kato</i>	<i>kao</i> < * <i>kaõn</i>	'loss'	<i>kaduda</i> < * <i>katoõak</i>	<i>kaon</i> < * <i>kaõn</i>	'to disappear'
STRENGTHENING GRADATION					
Partitive	Genitive	Gloss	Infinitive	Present 1Sg	Gloss
<i>hüpet</i> < * <i>hüppettä</i>	<i>hüppe</i> < * <i>hüppeken</i>	'jump'	<i>hüpata</i> < * <i>hüppättäk</i>	<i>hüppan</i> < * <i>hüppäñän</i>	'to jump'
<i>loet</i> < * <i>lõõetta</i>	<i>loode</i> < * <i>lõõehen</i>	'north-west'	<i>oiata</i> < * <i>oikattak</i>	<i>oigan</i> < * <i>oikañan</i>	'to moan'

In addition, 36 nominals whose partitive is a monosyllabic including a partitive case ending *-tt*, *-t* or *-d* are somewhat problematic (*kätt* from *käsi* 'hand', GSg *käe*; *ett* from *esi* 'front', GSg *ee*; *kõit* from *kõis* 'rope', GSg *kõie*; *uut* from *uus* 'new', GSg *uue*; *üht* from *üks* 'one', GSg *ühe*, cf. Table 5). Here, as a result of reanalysis, the former consonantal stem lost its final stop \**t* that was moved to the partitive case formative from \*-*tA*. Thus, the former consonantal stem is often shortened to a vocalic stem and such a loss is equalized by qualitative gradation. It is, however, important to remember that strengthening and weakening are not properties of stems but first of all the effect of the former varying structure of the following unstressed syllable on the stressed syllable and/or the following syllable-initial stop. Monosyllabic stems as in GSg *käe*, *ee* are weak-grade stems because their monosyllabicity results from vowel contraction of vowel sequences that arose after the loss of an intervocalic consonant under gradational weakening. Monosyllabic stems such as *kä-*, *e-*, *kõi-*, *uu-*, *üh-* in partitive singular forms do not result from vowel contraction but from the shortening of monosyllabic stems. As the underlying form of such partitive singular forms had an open second syllable,

the stems anyhow represent the strong grade of the stems. In principle, all long stressed syllables that are not weakened under quantitative gradation are of the strong grade. To be consistent, Estonian quantitative gradation must be considered to include in addition to the traditional amount of stems also 7 stems with a monosyllabic stem allomorph in the partitive singular and a disyllabic stem allomorph of Q1 both in the genitive and nominative that do not undergo qualitative gradation (*tuli* 'fire', GSg *tule*, PSg *tuld*; *lumi* 'snow', GSg *lume*, PSg *lund*; *veri* 'blood', GSg *vere*, PSg *verd*; *kusi* 'urine', GSg *kuse*, PSg *kust*).

In popular grammars the nominative singular as the headword of nominals in all dictionaries has been presented as one of the main forms instead of the partitive and supine illative versus the first person singular of the present indicative of verbs with weakening gradation and infinitive for verbs with strengthening gradation. Both methods are correct from the historical viewpoint. The nominative-based approach causes more problems as there are 72 nominals whose nominative case is of Q1 instead of Q3 because after vowel apocope either (a) the final consonant *j* of a consonant cluster was vocalized to *i* (*tühi* 'empty' < \**tühjä*, GSg *tühja*, PSg *tühja*; *vari* 'shadow' < \**varjo*, GSg *varju*, PSg *varju*) or (b) an epenthetic vowel was inserted to avoid final consonant clusters of the type OBSTRUENT + RESONANT (*ader* 'plough' < \**atr* < \**atra*, GSg *adra*, PSg *atra*). In addition, because of apocope, the usually monosyllabic nominative case forms of words with weakening gradation bear no information about the stem vowel of other strong-grade stems. In principle, the stem vowel is anyhow predictable on the basis of comparison of nominative and genitive forms, cf. Table 9.

**Table 9.** Nominative singular form as a strong-grade form in Standard Estonian

	Underlying forms			Standard Estonian			Gloss
	NSg	GSg	PSg	NSg	GSg	PSg	
(1)	* <i>tukka</i>	* <i>tukkan</i>	* <i>tukkaia</i>	<i>tukk</i>	<i>tuka</i>	<i>tukka</i>	'shock of hair'
(2)	* <i>kukkei</i>	* <i>kukkein</i>	* <i>kukkeiia</i>	<i>kukk</i>	<i>kuke</i>	<i>kukke</i>	'cock'
(3)	* <i>tukki</i>	* <i>tukkin</i>	* <i>tukkiia</i>	<i>tukk</i>	<i>tuki</i>	<i>tukki</i>	'smouldering log'
(4)	* <i>laki</i>	* <i>laiken</i>	* <i>lakeia</i>	<i>lagi</i>	<i>lae</i>	<i>lage</i>	'ceiling'
(5)	* <i>säki</i>	* <i>säken</i>	* <i>säkeia</i>	<i>saag</i>	<i>sae</i>	<i>saagi</i>	'saw'
(6)	* <i>rōko</i>	* <i>rōkon</i>	* <i>rōkoia</i>	<i>roog</i>	<i>roo</i>	<i>roogu</i>	'reed'
(7)	* <i>marja</i>	* <i>marjan</i>	* <i>marjaia</i>	<i>mari</i>	<i>marja</i>	<i>marja</i>	'berry'
(8)	* <i>varjo</i>	* <i>varjon</i>	* <i>varjoia</i>	<i>vari</i>	<i>varju</i>	<i>varju</i>	'shadow'
(9)	* <i>latva</i>	* <i>latvan</i>	* <i>latvaia</i>	<i>latv</i>	<i>ladva</i>	<i>latva</i>	'treetop'
(10)	* <i>patja</i>	* <i>patjan</i>	* <i>patjaia</i>	<i>padi</i>	<i>padja</i>	<i>patja</i>	'pillow'

Given that radical gradation is primarily weakening of a stressed syllable conditioned by the following closed unstressed syllable, there nevertheless exist cases of weakening of the initial syllables that remain beyond the scope of weakening and strengthening gradation. There are two types of nominals where the historical gradation occurs outside the usual diagnostic forms. First, the paradigm of the words 'teine 'other; second', GSg 'teise and 'naine 'woman; wife', GSg naise have alongside regular monosyllabic partitive singular forms also regular partitive plural forms of Q3, cf. 'teisi < \*toisiĭa and naisi < \*naisiĭa, whereas all other forms are of Q2 because they originally had an underlying closed second syllable. Second, nominals with a monosyllabic vocalic stem are weakened and of Q2 in genitive plural and most other plural forms, e.g. 'puude < \*pūĭen from 'puu 'tree'; several Estonian dialects have somewhat different forms but still mostly of Q2, cf. Saareste 1955a, Map 75. Similarly, all verbs with an original monosyllabic vocalic stem have regular forms of Q2 for all plural forms of present and past indicative as their second syllable was formerly closed, cf. Table 10. The same is true for the inessive, elative, translative, and abessive forms of supine and for the personal past participle as contrasted with the illative supine and impersonal past participle, cf. Table 11.

**Table 10.** Disguised gradation in personal forms  
of monosyllabic verb stems

	Underlying forms				Standard Estonian			
	Present		Imperfect		Present		Imperfect	
	Singular	Plural	Singular	Plural	Singular	Plural	Singular	Plural
1 <sup>st</sup>	*sān	*sāmmek	*sain	*saiĕmek	'saan	saame	'sain	saime
2 <sup>nd</sup>	*sāt	*sāttek	*sait	*saiĕtek	'saad	saate	'said	saite
3 <sup>rd</sup>	*sāpi	*sāpat	*sai	*sait	'saab	saavad	'sai	said

**Table 11.** Disguised gradation in non-finite forms  
of monosyllabic verb stems

	Supine				Participle	
	Illative	Inessive	Elative	Abessive	Ps Past	Ips Past
Underlying form	*sāmahen	*sāmasna	*sāmasta	*sāmattak	*sānut	*sātu
Modern form	'saama	'saamas	'saamast	saamata	'saanud	saadud

### 3.4. Tendencies of the development of the vowel system

In Proto-Finnic there were obviously symmetrically 8 short and 8 long vowel phonemes in initial stressed syllables and 7 short vowels in non-initial syllables. In initial syllables there were 3 pairs of short vowels and 3 pairs of long vowels and in non-initial syllables 2 pairs of short vowels that contrasted with each other only on the basis of the features back vs. front; 2 short vowels (*i* and *e*) and 2 long vowels (*ī* and *ē*) remained outside the pairs despite being phonetically front vowels, cf. Table 12.

**Table 12.** Vowels in Proto-Finnic

Initial syllables						Non-initial syllables		
<i>u</i>	<i>ü</i>	<i>i</i>	<i>ū</i>	<i>ǖ</i>	<i>ī</i>	<i>u</i>	<i>ü</i>	<i>i</i>
<i>o</i>	<i>ö</i>	<i>e</i>	<i>ō</i>	<i>ȫ</i>	<i>ē</i>	<i>o</i>		<i>e</i>
	<i>a</i>	<i>ä</i>		<i>ā</i>	<i>ā̄</i>		<i>a</i>	<i>ä</i>

Characteristically, Proto-Finnic had vowel harmony. A syllable containing either a back or a front member of a pair could be followed by syllables containing either an unpaired vowel or, respectively, only the back or front member of a pair. As in non-initial syllables, *o* did not belong to a pair, *o* could occur in a non-initial syllable even when the preceding syllables contained front members of such pairs. On the other hand, a non-initial syllable containing the back vowel *o* could not be followed by syllables containing front members of contrasting pairs. Stressed syllables containing an unpaired front vowel *i*, *e*, *ī*, or *ē* could be followed by a syllable containing either a front vowel different from *ö* or a back vowel. Because of that unpaired front vowels are sometimes referred to as neutral vowels.

**Table 13.** Southern Finnic vowels before individual changes

Initial syllables						Non-initial syllables		
<i>u</i>	<i>ü</i>	<i>i</i>	<i>ū</i>	<i>ǖ</i>	<i>ī</i>	<i>u</i>	<i>ü</i>	<i>i</i>
<i>o</i>	<i>ɛ</i>	<i>ö</i>	<i>e</i>	<i>ō</i>	<i>ē̄</i>	<i>o</i>	<i>ɛ</i>	<i>e</i>
	<i>a</i>	<i>ä</i>		<i>ā</i>	<i>ā̄</i>		<i>a</i>	<i>ä</i>

The southern Finnic dialects, i.e. all Livonian, Estonian, and Votic dialects, except Coastal Estonian and Kukkuži Votic, have developed back vocalic counterparts *ɛ* and *ē̄* for the short and long front vowels *e* and *ē* (\**velka* ‘debt’ > \**velka*, Estonian *võlg*; \**mēkka* ‘sword’ > \**mēkka*, Estonian *mõõk*; South Estonian \**sukeneksek* > *sugõ’nõsõq* ‘they arise’), cf. Table 13 and Figure

10. The rise of *e* and *ē* took place before the rise of quantity alternation in North, East, and South Estonian.

### 3.4.1. Long vowels in initial syllables

The further development of the vowel system of initial syllables took place in different directions: (1) raising of long mid vowels, (2) lowering of long high vowels, (3) breaking of long vowels, (4) shortening of long vowels. Except some cases of raising of long mid vowels in monosyllabic vocalic verb stems and some cases of breaking of *\*ā* into *ea* and *\*ū* into *üi* (still written as *üü*) the developments (1)–(3) are considered dialectal and have been levelled by now.

#### 3.4.1.1. Raising of long mid vowels

In all Estonian dialects and in West Votic the long mid labial vowel *\*ō* was raised to the high vowel *\*ū* before *\*w* from the weakened stop *\*ĩ* followed by *\*a* (*\*tōĩak* > *\*tōwak* > *\*tūwak* ‘to bring’, cf. e.g. Standard Estonian *tuua* [*tūwa*] ~ [*tū,a*], 3Sg *toob*; North-East Estonian *tuuva*, 3Sg *tuob*; East Vaivara Coastal Estonian *tuvva*, 3Sg *tuob*; Võru South Estonian *tuvvaq*, 3Sg *toose*), cf. 3.3.1.1 and Table 7. Locally a similar raising of the long mid *\*ē* occurs before *\*j* from the weakened stop *\*ĩ* followed by *\*ā* or *a* (*\*kēĩāk* > *\*kējāk* > *\*kījāk* ‘to boil (iv)’, cf. Insular and Western North Estonian *kiia* [*kīja*], 3Sg *keeb* and Võru *kiiäq*, 3Sg *keese*). A similar raising of *\*ō* may have occurred both before *\*w* or *\*j* from the weakened stop *\*ĩ* followed by *\*ā* (*\*sōĩāk* > *\*sōwāk* > *\*sūwāk* ‘to eat’, cf. Coastal Estonian *süüä* [*sūwä*], North-East Estonian *süvvä*, *süä*, South Estonian *süvväq*, and *\*sōĩāk* > *\*sōjāk* > *\*sūjāk* ‘to eat’, cf. Haljala *süüja*). As the change *\*ĩ* > *\*j* after a long monophthong different from *\*ĩ* is not characteristic of the historical cradle of Standard Estonian, the corresponding Standard Estonian forms of the type (cf. *süüa* [*süija*] ‘to eat’, *lööa* [*lööja*] ‘to hit’) rather result from the breaking of the long high vowel *\*ū* from *\*ō* that had raised before *\*ĩ* > *\*w*. This change concerns infinitives and affirmative present indicative impersonal forms of verbs with a monosyllabic stem. Note that in Standard Estonian such infinitive forms are of Q3 instead of the expected Q2.

Resulting from strengthening or loss of *\*w* and the influence of strengthening on the raised vowel, the correspondences of the raised long vowels in infinitive forms in Estonian dialects vary to a great extent, cf. Figure 11. The similar raising in gerunds of verbs with a monosyllabic stem (cf. *tuues* ‘bring-

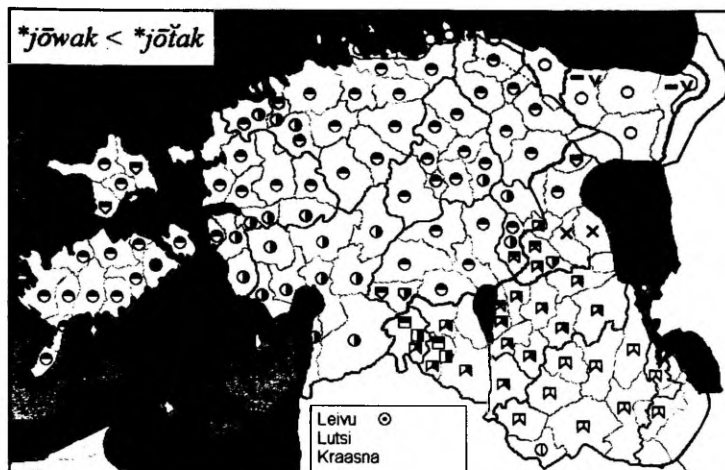


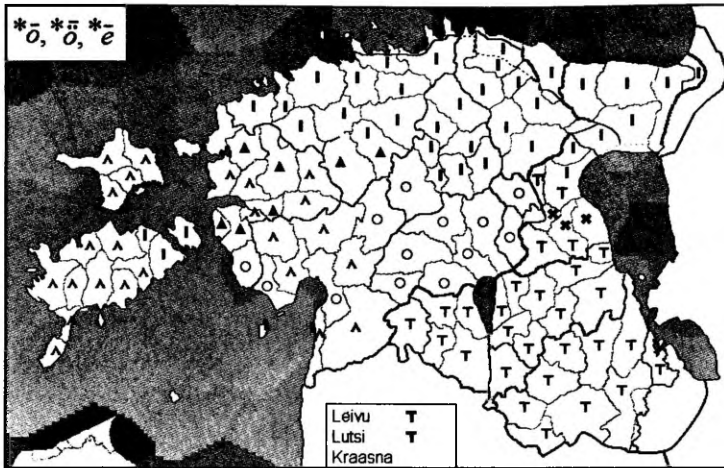
Figure 11. Reflexes of *\*ō* in *\*jōlak* > *\*jōwak* 'to drink (Inf)' after long mid labial vowel raising

Key: ○ 'juua, ◐ 'juua, ⊕ 'juuaq, ○ juua, ⊙ d'oua, ● 'jōua, — jua, ▣ 'juuvva, ▤ 'juuvva, ▥ 'juuva, ▦ 'juuva, ▧ 'juuva, ▨ 'juuvaq, ▩ juva, ✕ 'juoda.

ing', 'juues 'drinking', 'süües 'eating') probably occurred by analogy with infinitives as elsewhere the sequence *\*ōīe* developed into the diphthong *oe* (*\*lōīeh* > 'loe 'north-west', *\*pōīet* > 'poed 'shops'), cf. also 3.4.1.4.

In South and East Estonian, long mid vowels *ō*, *õ*, *ē* were raised to [ŷ~ŷ̃, ũ~ũ̃, ĩ~ĩ̃] in syllables of Q3, cf. Figure 12, i.e. if the word was monosyllabic or the initial syllable was followed by an open syllable: *\*sōla* 'salt' > [sŷl] GSg *\*sōlan* > [sōlā], *\*tō* 'work' > tŷ, *\*kēli* 'tongue' > [kĩl] GSg *\*kēlen* > [kēlē]. In Kodavere East Estonian the raised vowels are described as identical with the original high vowels. Despite this raising can be characterized as a shift, the raised long vowels have been treated as a phonemic norm, maybe due to South Estonian and North Estonian bilingualism of South Estonians. This made possible the introduction of new long mid vowels by later developments and borrowings from North Estonian into South Estonian. For example, after the loss of the vowel *i* in nominative singular forms of South Estonian *ik*-derivatives with the initial syllable of Q2, the nominative form became a monosyllable of Q3 and the long vowel of the initial syllable was additionally lengthened but not raised, cf. *loodsik* and 'lootisk [lōtisk] 'boat'; in Võru South Estonian the shortened form was generalized also to the vocalic stem that occurs in other case forms, cf. 'lootisko [lōtisko] 'of boat (GSg)

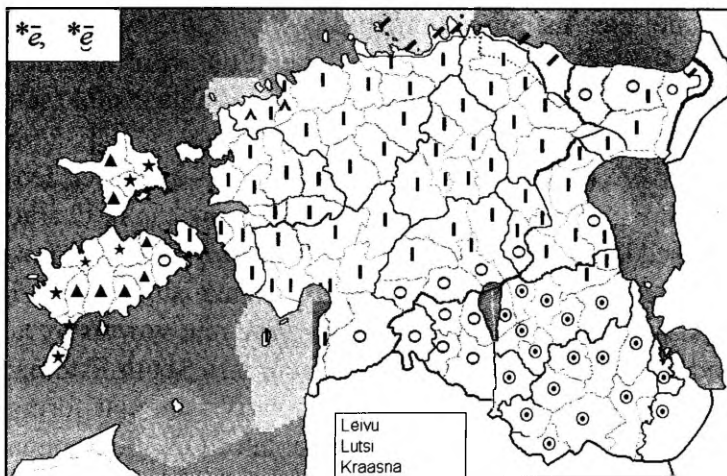
In Tartu and Võru South Estonian also the mid vowel *ē* is raised to ĩ̃ ~ ĩ̃̃ (orthographic *yy*) in words of Q3, e.g. 'myyk 'sword', GSg *mōōga*, cf.



**Figure 12.** Reflexes of long mid vowels *\*ō, \*ō̄, \*ē* in Estonian dialects

**Key:** O *\*ō, \*ō̄, \*ē* are retained in both Q2 and Q3; ▲ *{\*ō \*ō̄ \*ē} > {ō̄ ō̄̄ ē̄}* in both Q2 and Q3; | *{\*ō \*ō̄ \*ē} > {uo üö ie}* in both Q2 and Q3; ▲ *{\*ō \*ō̄ \*ē} > {ō̄ ō̄̄ ē̄} ~ {uo üö ie}* in both Q2 and Q3; T *{\*ō \*ō̄ \*ē} > {ū ū ī}* only in Q3; X *{\*ō \*ō̄ \*ē} > {uo üö ie}* in Q2, *{\*ō \*ō̄ \*ē} > {ū ū ī}* in Q3.

**Note.** This Figure does not present data on *\*ē* in back vocalic stems and on *\*ō* and *\*ō̄* after long mid vowel raising before *\*w*.



**Figure 13.** Reflexes of the Proto-Finnic *\*ē̄* of back vocalic stems in Estonian dialects

**Key:** / *\*ē̄ > ie*; O *\*ē̄ > \*ē̄̄ = ȫ̄*; | *\*ē̄ > \*ē̄̄ > ȫ̄e*; ★ *\*ē̄ > \*ē̄̄ > ð̄̄*; ▲ *\*ē̄ > \*ē̄̄ > \*ō̄̄ = ȫ̄* in both Q2 and Q3; ▲ *\*ē̄ > \*ē̄̄ > \*ō̄̄ > ȫ̄e*; ⊙ *\*ē̄ > \*ē̄̄ = ȫ̄* in Q2 and *\*ē̄ > \*ē̄̄ > ī̄̄ = yy* in Q3.

Figure 13. As in some words also the short *e* changed to *i*, the vowel system of the initial syllables in Tartu and Võru South Estonian is as follows:

<i>u</i>	<i>i</i>	<i>ü</i>	<i>i</i>	<i>ū</i>	<i>ī</i>	<i>ũ</i>	<i>ĩ</i>
				<i>ȳ</i>		<i>ȳ̃</i>	<i>ĩ̃</i>
<i>o</i>	<i>e</i>	<i>ö</i>	<i>e</i>	<i>ō</i>	<i>ē</i>	<i>õ</i>	<i>ē</i>
	<i>a</i>	<i>ä</i>		<i>ā</i>			<i>ā</i>

According to Lauri Kettunen (1912: 67, 1913: 176, 1962: 138), South Estonian long mid high vowels in Q3 rose from the diphthongs *uo*, *üö*, *ie*. This claim is clearly based on the occurrence of such diphthongs in Kodavere and its neighbourhood, and, probably, is influenced by alternations of the type *suâr* ‘island’ GSg *sārē* where the diphthong occurs in the strong grade. On the other hand, it contradicts the fact that in most of the area there are no diphthongs *uo*, *üö*, *ie*. In addition, the raising of long vowels is more frequent than breaking, and even the geography of mid vowel raising in Q3 should be an indication that the raising of long mid vowels of Q3 bled the range of breaking of long mid vowels in Kodavere and its neighbourhood, cf. Figure 12. Moreover, the raising of long mid vowel in East Estonian is likely an influence of South Estonian whereas the breaking of long mid vowels is an influence of North or North-East Estonian. In western North Estonian, except Jaani, Pöide, Muhu, and Kihnu, all long mid vowels *ō*, *õ*, *ē* are raised to [*ō̃* *õ̃* *ē̃*]; this raising has not changed the number of vowel phonemes.

### 3.4.1.2. Lowering of long high vowels

The long high vowels *ū*, *ũ*, *ĩ* were lowered to [*ȳ*, *ȳ̃*, *ĩ̃*] in Q2 in East Estonian and in some parts of Tartu South Estonian and even in North Estonian (Keem 1970: 17, Univere 1988: 73). This lowering must be considered phonemic as the area of long high vowel raising partially overlaps with the area of long mid vowel raising in Q3, described in 3.4.1.1, cf. the phonetic distribution of reflexes of the original high and mid vowels in Table 14.

**Table 14.** Distribution of high and mid vowels in East Estonian and Tartu South Estonian

	<i>*ū</i>	<i>*ũ</i>	<i>*ĩ</i>	<i>*ō</i>	<i>*õ</i>	<i>*ē</i>
Q3	<i>û/ũ</i>	<i>û/ũ̃</i>	<i>î/ĩ</i>	<i>ȳ/ȳ̃</i>	<i>ȳ̃/ȳ̃̃</i>	<i>ĩ/ĩ̃</i>
Q2	<i>ȳ</i>	<i>ȳ̃</i>	<i>ĩ̃</i>	<i>ō</i>	<i>õ</i>	<i>ē</i>

### 3.4.1.3. Breaking of long vowels

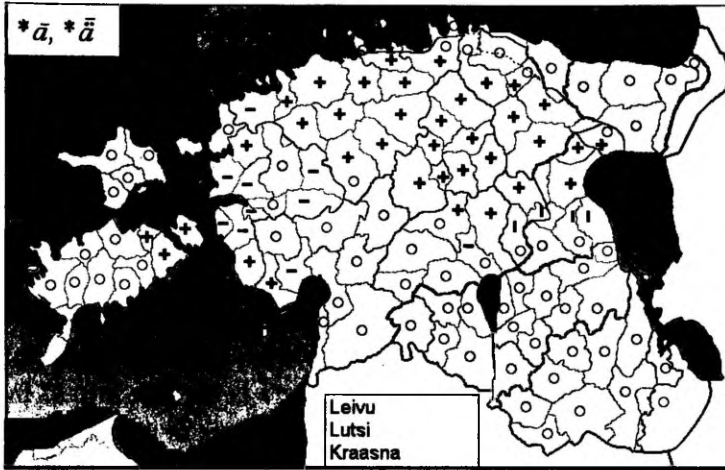
The breaking of long vowels includes several separate changes mostly in partially overlapping areas.

The breaking of the old long mid vowels *\*ō*, *\*ō̄*, *\*ē* (except *\*ē* in back vocalic stems) into diphthongs *uo*, *üö*, *ie*, cf. Figure 12, is probably older than other types of long vowel breaking but younger than the split of *\*ē*. Except Kodavere and its two neighbouring East Estonian parishes, this kind of breaking occurred in dialects with the contrast of Q2 and Q3 in both quantities. The possible reasons for this exceptionality were discussed in 3.4.1.1. The breaking of long mid vowels in Estonian is typologically identical with that in East Finnish and Karelian as breaking includes also those long mid vowels that resulted from vowel contractions after the reflexes of single stops in weak-grade forms were lost. Except this detail, a similar breaking of long mid vowels occurred in Livonian, in one part of West Votic (in Pontizõõ and Mätši), Finnish, Karelian, Lappic, Latvian, and Lithuanian. Despite the wide distribution of breaking of long mid vowels in the north-western part of the European mainland, it is possible that this breaking owes its rise to some additional preconditions once shared by the languages of different origin in the area. For example, it could be influenced by former velarized vs. palatalized consonants that preceded, respectively the back and front long vowels.

As *\*ē* was not changed to *\*ē̄* in Coastal Estonian, *\*ē* in Coastal Estonian underwent the breaking of *\*ē* into *ie* also in back vocalic stems. Note that Figure 13 does not present the diphthongs *ue* ~ *oe* ~ *öe* that belong to the newer usage of Coastal Estonian, cf. Must (1987: 125). These diphthongs probably do not result from the breaking of *\*ē* but reflect failures in attempts to imitate the diphthong *õe* [e̯e] of the neighbouring North Estonian dialects, cf. Figure 13. Similarly, the diphthong *uo* as a correspondence of *\*ē̄* in central Vaivara is a substitute for *\*ē̄* in the framework of substituting of all the illabial back mid vowels for the labial back mid vowels.

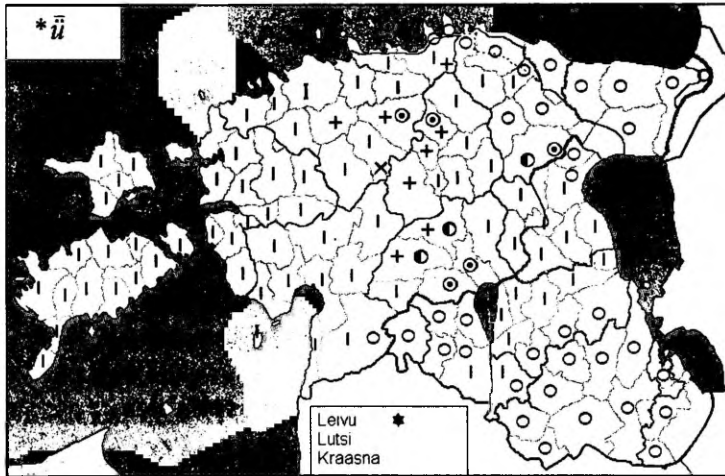
On the other hand, the breaking of *\*ē̄* into *õe* in the main body of North Estonian and some neighbouring dialects has no known analogies in other languages except the somewhat analogical breaking of *\*ǖ* into *üi* in North Estonian. In view of the fact that (a) *\*ē̄* comes from the still older *\*ē* and (b) *\*ē* has often broken into *ie*, it cannot entirely be excluded that the diphthong *õe* does not result from the breaking of *\*ē̄* but from the velarization of *ie* after a velarized consonant.

The long low vowels *\*ā* and *\*ā̄* broke into *oa* > *ua* and *eä* > *iä* mainly in North Estonian and East Estonian, in East Estonian locally only in Q3, cf. Figure 14. The breaking of *\*ā̄* must have taken place at a time when the vowel harmony was still active; after the loss of vowel harmony in North



**Figure 14.** Reflexes of long open vowels  $*\bar{a}$  and  $*\bar{a}̄$  in Estonian dialects

**Key:** ○ both  $*\bar{a}$  and  $*\bar{a}̄$  are retained; |  $\bar{a} > oa \sim ua$ ; -  $*\bar{a}̄ > e\bar{a} \sim i\bar{a} \sim ea \sim ia$ ; + both  $*\bar{a} > oa \sim ua$  and  $*\bar{a}̄ > e\bar{a} \sim i\bar{a} \sim ea \sim ia$ .



**Figure 15.** Reflexes of the long labial front vowel  $*\bar{u}$  in Estonian dialects

**Key:** ○  $*\bar{u} = \bar{u}\bar{u}$ ; ⊙  $*\bar{u} > \bar{u}\bar{i}$  in Q3,  $*\bar{u} = \bar{u}\bar{u}$  in Q2; ●  $*\bar{u} > \bar{u}\bar{i}$ , except before  $r$ ; |  $*\bar{u} > \bar{u}\bar{i}$  everywhere; +  $*\bar{u} > \bar{u}\bar{i}$  in Q3,  $*\bar{u} > \bar{u}\bar{e}$  in Q2; ✕  $*\bar{u} > \bar{u}\bar{i}$  in Q3,  $*\bar{u} > \bar{o}\bar{e}$  in Q2; ★  $*\bar{u} > \bar{o}\bar{u}$ .

Estonian dialects *eä* and *iä* were replaced by *ea* and *ia*. Similar but probably independent breaking of long low vowels occurred also in Savo and Savakko Finnish, Karelian, and Lappic. Long *\*ā* was broken into *ua* also in Ruhnu Swedish, probably due to the influence of Kihnu Estonian.

The long high vowel *\*ū* was broken into *üi* in North and East Estonian, in the north-western part of Tartu South Estonian, and in the southeasternmost part of Mulgi South Estonian, cf. Figure 15. This breaking is similar to that of *\*ē* into *ōe*.

The breaking of long high vowels *\*ū*, *\*ū̄*, *\*ī* into *ou*, *öü*, *ei* in Võru Estonian enclaves in Latvia and on the border of Latvia is shared to a certain extent with the Baltic dialects in Latvia. So *\*ī* is broken into *ei* in the most part of Latgallian and in eastern Selian, *\*ū* into *ou* in eastern Selian and in Vidzeme; the Latgallian reflex *yu* [*i̯u*] of *\*ū* may have developed via *ou* as *ou* has been documented in Latgale in 1519. The Võru Estonian and Latvian, viz. Latgallian breakings are clearly related, except that Latgallian has never had a labial front vowel like *\*ū̄*.

#### 3.4.1.4. Shortening of long vowels

Long vowels in initial syllables are shortened in the case of vowel contraction after the loss of a weakened single stop, cf. *\*lēkat* ‘tethers, halters’ > *lōad*, *lōteh* > *loe* ‘north-west’, *\*rākot* ‘bare twigs’ > *raod*, *\*sāket* > *saed* ‘saws’, *pōiet* > *poed* ‘shops, stores’. The stem vowel *i* in strong-grade forms of words of Middle German origin such as *poodi* ‘shop, store (PSg)’, *saagi* ‘saw (PSg)’ results from a later change as evidenced both by their genitive forms and Low German source forms *bōde*, *sage* ~ *saghe*.

#### 3.4.2. Short vowels in initial syllables

Short vowels have mostly participated in sporadic changes. There are also some systematic changes of short vowels in Estonian dialects:

- (a) replacement of the articulatorily most complicated vowel *\*e*, namely by mergers of *\*e* with *\*ō* in Hiiumaa and Saaremaa, cf. 2.3.5.2, and with *\*o* in Central Vaivara, cf. 2.3.3;
- (b) breaking of *\*i* into *jō* in originally back vocalic stems in Kihnu, cf. *ljōnd* ‘bird’, *rjōda* ‘row’, *sjōld* ‘bridge’, *jōlus* ‘nice, beautiful’; *ō* stands here for a vowel transcribed by different dialectologists as *i̯*, *ī̯*, *e* or *ē*. Its formant structure has never been studied. There is also another problem connected with the result of breaking: it is unclear whether the initial component

written here as *j* is always a segment or it has contracted with the preceding consonant to compose a palatalized consonant;

- (c) raising of *\*e* to *i* before *ng* [ŋɡ] and *nk* [ŋkk] in North Estonian, e.g. in *hing* 'soul', *king* 'shoe', *kink* 'gift', *pink* 'bench'. As this change involves several Low German borrowings, it must have taken place after the 13<sup>th</sup> century.

In a few words in Kihnu, Juuru, and Võru, the front vowels *ä* and *ü* are backed after palatalized initial consonants, cf. Kihnu, Juuru *śalg* 'colt; filly' < *\*sälko*, Kihnu and Võru *řakk* 'stallion'. A similar backing is known also in Votic, cf. *śalko*.

### 3.4.3. Diphthongs in initial syllables

In the framework of the rise and spread of *\*e* in most Estonian dialects, Livonian, and Votic, *\*e* was replaced by *\*e* in the former diphthongs *\*ei* and *\*eu* in words with back vowels. After the vocalization or drift of the post-vocalic *\*k* to *\*e* in consonant clusters *\*kl* and *\*kr* the first diphthongs ending in *e* appeared at least in North and East Estonian: *\*kakra* 'oats' > *'kaer(a)*, *\*nekla* 'needle' > *'nõel(a)*. It is possible that the long monophthong *aa* in words like *'kaar* 'oats', *'kaal* 'neck' in Hiiumaa, Kodavere East Estonian, and South Estonian comes from *\*ae*. In Coastal and North-East Estonian *\*k* was vocalized to *u* in similar cases: *kaur* 'oats', *kaul* 'neck', *neul* ~ *niul* 'needle'; the same innovation is characteristic of West Finnish and also of Narvusi Finnish. Later, after the loss of reflexes of single intervocalic stops in weak-grade forms in the majority of Finnic dialects, vowel contractions have generated a number of new diphthongs ending in *a*, *ä*, *e*, and *o*. In North, East, and South Estonian this process led to the rise of a number of diphthongs in syllables of Q3 that have no equivalents in syllables of Q2, cf. Figure 16. In addition, North Estonian witnessed the rise of several diphthongs ending in *e* that occur both in Q2 and Q3 as a result of opening of the former second component *\*i*, cf. *\*koira* 'dog' > *'koer* GSg *\*koiran* > *'koera*, *\*laiva* 'ship' > *'laev* GSg *\*laivan* > *'laeva*, *\*päivä* 'day' > *päev*: GSg *\*päivän* > *päeva*. In dialects, the diphthongs have changed in different ways.

The mainland dialects of Northern Estonian, except the northernmost part, and more regularly in East and South Estonian, had a tendency to assimilate the final components *i*, *u*, *ü* by the initial components of diphthongs in words of Q2 (GSg *'leiva* ~ *'leivä* > *'leeva* ~ *'leevä* from *'leib* 'bread', *'lõuna* > *'lõõna* 'south', GSg *sauna* > *saana* from *saun* 'sauna', cf. Saareste 1955a, Maps 67, 69, and 105). In addition, North and East Estonian had a tendency to assimilate the second component *e* by the initial component *ä* of diph-

thongs, especially in monosyllables (*päev* > *pää(v)* ‘day’, cf. Saareste 1955a, Map 99); somewhat aberrantly similar tendency occurs in diphthongs arisen by contraction (IneSg *käes* > *kääs* from *käsi* ‘hand’, cf. Saareste 1955a, Map 62). Moreover, it is possible that the long monophthong *aa* in words like *kaar* ‘oats’, *kaal* ‘neck’ in Hiiumaa, Kodavere East Estonian, and South Estonian comes from *\*ae* and not from vocalization of *\*k*.

The secondary diphthongs that arose as the result of vowel contraction after the loss of weakened single intervocalic stops in the weak-grade forms underwent two assimilative changes. First, in most insular dialects, the northern part of Läänemaa, the southern part of Harjumaa, the southern part of Pärnumaa, Viljandimaa, in the southern part of East Estonian and in South Estonian, high initial components of diphthongs were lowered before low or mid final components: (*\*siga* ‘hog’) : *sia* (GSg) > *sea*, (*\*suko* > *sugu* ‘sex, gender’) : *suo* (GSg) > *soo*, *küdeda* ‘to burn (of a stove)’ : *küeb* (3Sg) > *köeb*. As alternations such as *siga* : *sea*, *sugu* : *soo*, etc. are characteristic of Standard Estonian, this change has been prestigious. Second, especially in the northernmost North Estonian and its neighbouring dialects the new diphthongs ending in *o* were replaced by diphthongs ending in *u*: *\*näo* ‘face (GSg)’ > *näü*, *teo* ‘deed (GSg)’ > *teu*, *tio* ‘snail (GSg)’ > *tiu*.

Proto North Estonian				Standard (North) Estonian						
	<i>*u</i>	<i>*ü</i>	<i>*i</i>		<i>u</i>	<i>o</i>	<i>a</i>	<i>e</i>	<i>i</i>	
<i>*u</i>	—		<i>ui</i>		<i>u</i>	—	( <i>uo</i> <sup>2</sup> )	( <i>ua</i> )	( <i>ue</i> )	<i>ui</i> <sup>2</sup>
<i>*o</i>	<i>ou</i>		<i>oi</i>		<i>o</i>	<i>ou</i> <sup>2</sup>	—	<i>oa</i>	<i>oe</i> <sup>2</sup>	<i>oi</i> <sup>2</sup>
<i>*a</i>	<i>au</i>		<i>ai</i>		<i>a</i>	<i>au</i> <sup>2</sup>	<i>ao</i>	—	<i>ae</i> <sup>2</sup>	<i>ai</i> <sup>2</sup>
<i>*e</i>	<i>eu</i>		<i>ei</i>		<i>õ</i>	<i>õu</i> <sup>2</sup>	<i>õo</i>	<i>õa</i>	<i>õe</i> <sup>2</sup>	<i>õi</i> <sup>2</sup>
<i>*ü</i>		—	<i>üi</i> <sup>1</sup>	>	<i>ü</i>		( <i>üo</i> )	( <i>üa</i> )	( <i>üe</i> )	<i>üi</i> <sup>2</sup>
<i>*õ</i>		<i>õü</i>	<i>õi</i> <sup>1</sup>		<i>ö</i>			<i>öa</i>	<i>öe</i>	<i>öi</i> <sup>2</sup>
<i>*ä</i>		<i>äü</i>	<i>äi</i>		<i>ä</i>	<i>äu</i> <sup>2</sup>	<i>äo</i>		<i>äe</i> <sup>2</sup>	<i>äi</i> <sup>2</sup>
<i>*e</i>		<i>eü</i>	<i>ei</i>		<i>e</i>	( <i>eu</i> <sup>2</sup> )	<i>eo</i>	<i>ea</i> <sup>2</sup>	—	<i>ei</i> <sup>2</sup>
<i>*i</i>		<i>iu</i>	—		<i>i</i>	<i>iu</i> <sup>2</sup>	( <i>io</i> )	( <i>ia</i> )	( <i>ie</i> )	—

**Figure 16.** Changes in the North Estonian diphthong system

**Notes.** <sup>1</sup> The two components of the diphthong belong to different morphemes. <sup>2</sup> In addition to Q3, this diphthong occurs also in Q2. All diphthongs presented in parentheses occur only in late borrowings.

### 3.4.4. Short vowels in non-initial syllables

Depending on the dialect, the vowels of non-initial syllables underwent apocope, syncope, contractions, and mergers.

#### 3.4.4.1. Syncope and apocope

Except in North-East Estonian and partially in Coastal Estonian, the last vowel of a word has been regularly lost in disyllabic words with a long initial syllable, trisyllabic or longer words (\**laulu* > *laul* 'song', \**tuhka* > *tuhk* 'ashes', \**jumala* 'god' > *jumal*).

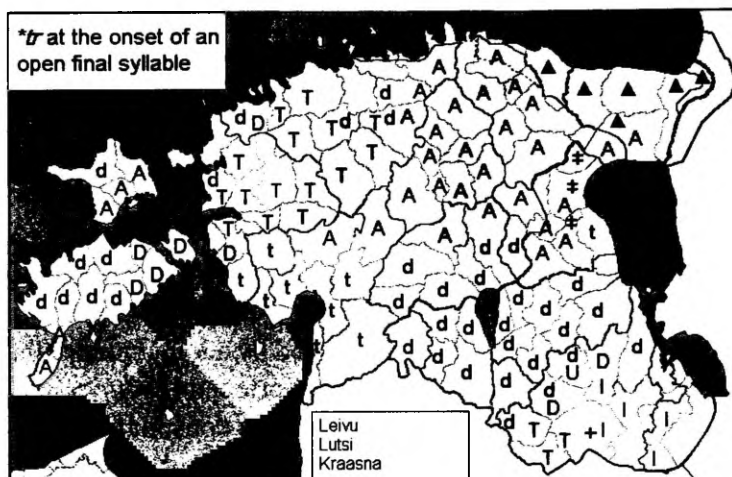
If the apocopated final vowel followed a consonant cluster ending in *j*, the consonant *j* was vocalized to *i* (\**patja* 'pillow' > *padi*, \**asja* 'thing; matter' > *asi*, \**tühjä* 'empty' > *tühi*, \**neljä* 'four' > *neli*). If the apocopated final vowel followed the consonant *j* preceded by a long monophthong, *j* was vocalized to *e* and the long monophthong shortened (\**sōja* > *soe* 'warm'). In western Estonia in similar conditions also the consonant *v* was vocalized to *u* (\**kaivo* > *kaju* '(water) well').

In some cases apocope gave rise to final consonant clusters that contradicted syllable structure conditions and triggered the rise of syllabic consonants in the second syllable as in Muhu and eastern Saaremaa (\**lehmä* > *lehm* [*lehm̩*] 'cow', \**atra* > *adr* [*adr̩*] 'plough'), epenthetic vowels (\**atra* > (\*)*atr̩* > *ader* 'plough' ~ dial. *ater* [*aṯter*]) or devoicing of word-final resonants (\**atra* > *atr* [*aṯr̥*]), cf. Figure 17. In Virumaa, Järvamaa, and their closest neighbourhood as well in eastern Hiiumaa this type of disyllabic stems remains beyond the scope of apocope. The most widespread exception to apocope is the nominative singular form of the agent nouns in *-ja*: probably the suffix was restored to avoid word-final diphthongs and long vowels in non-initial syllables, as they locally occur (Setu *tekii* 'doer', Hiiumaa *õpetai* 'teacher').

In Coastal and North-East Estonian, the apocope occurred later than elsewhere and in eastern Coastal Estonian and North-East Estonian apocope was only a variable feature even in the 20<sup>th</sup> century.

Except in Coastal and North-East Estonian, in words containing at least three syllables, the vowel of an open second syllable was syncopated after a long first syllable: \**laulanut* > *laulnud* 'sung (PsPastPle)', \**vahterat* > *vaht-rad* 'maples'. There are several exceptions to the rule, for example, in the northernmost North Estonian, Saaremaa, and Hiiumaa the high vowels *i* and *u* were not syncopated in verbs, cf. also Standard Estonian *istuma* 'to sit (Sup)', *pühkima* 'to sweep (Sup)'. This syncope is sometimes later than apocope

(\**kūluisa* > \**kūlusa* > '*kuulus* ~ '*kuulus* 'famous', NP1 \**kūluisat* > \**kūlusat* > '*kuulsad*; \**vāhtera* > \**vahtera* > \**vahter* > \**vah̃ter* > *vaher* 'maple', NP1 \**vāhterat* > \**vahterat* > '*vahtrad*). The nominative singular forms of Q3 such as '*kuulus* and dialectal '*vahter* show that locally apocope occurred only after the radical gradation ceased to be positionally conditioned.



**Figure 17.** Development of the nominative singular form \**atra* 'plough' in Estonian dialects

**Key:** ▲ *atra*, T *atr*; t *ater*, *atör*; þ *põtter*, A *adra*; D *adr*; d *ader*, *adör*; + *aadör*; I *adyr*, *adyr*.

**Note:** The unapocopated nominative form '*adra* and the corresponding identical genitive and partitive forms are probably everywhere treated as forms of Q1, i.e. as having an open first syllable, in contrast to the genitive singular form *adra* of '*ader* ~ '*adör* ~ '*adyr* ~ '*adyr* ~ '*ater* ~ '*atör* ~ '*atr*, as here the genitive form *adra* alternates with the partitive form '*atra*, i.e. it participates in the quantity alternation Q2 : Q3. Similarly, the nominative singular form *adr* is disyllabic at least in Muhu and has an open initial syllable, as the final resonant is syllabic.

A special case of syncope took place in the third syllable of verbs with a tetrasyllabic stem containing the derivational suffix \*-*ele*- either as a component of a complex suffix \*-*skele*- > -*skle*-, \*-*stele*- > -*stle*- or \*-*ttele*- > -*tle*- ('*olesk'lema* 'to idle', *suurust'lema* 'to boast', *arut'lema* 'to discuss') or following the sequence \**tt* of suffixal origin ('*vallat'lema* 'to frolic' from *vallatu* 'playful'). As the syncopated vowel originally carried the secondary stress, syncope must have preceded by a stress shift. Probably the stress was first shifted from the short third syllable to the long fourth syllable in pentasyllabic forms, e.g. \**o-leske:lettek* > \**o-leskele:ttek* > '*olesk'lete* 'you idle', cf. 3.1.

### 3.4.4.2. Qualitative changes of short vowels in non-initial syllables

Changes of vowel quality in Estonian are mostly connected with (a) distant assimilation of vowels, i.e. vowel harmony or umlaut, (b) the loss of vowel harmony, (c) mid vowel raising and (d) lowering or devoicing of high vowels.

As among the unpaired vowels *\*e* never occurred as a morpheme, *\*e* was most sensitive to the assimilative influence of paired vowels. Already in Proto-Finnic *\*e* was assimilated after an intervocalic *\*h* with a vowel, different from *\*i* or *\*ö*, of the preceding syllable in a sequence, except in a disyllabic stem (*\*varpahet* > *\*varpahat* 'toes (NPI)', *\*vakohen* > *\*vakohon* 'into a furrow (IllSg)'). Similarly, in Estonian and locally in Finnish *\*e* in the third syllable was assimilated to *\*a* or *\*ä* of the preceding syllable after the intervocalic *\*l* and *\*r* (*\*sampalen* > *\*sampalan* 'moss (GSg)', *\*vempälen* > *\*vempälän* (> *\*vembla* 'cudgel (GSg)'), *\*sestaren* > *\*sestaran* (> *sõstra* 'currant (GSg)'). In some cases such assimilation of the stem vowel has dragged along also some nouns that had *\*e* in their second syllable (*\*vahteren* > *\*vahteran* 'maple (GSg)'). Such nouns, similarly to *\*e*-stems, have in addition to an *a*-stem also a weak-grade consonantal stem (*'sammal*, *'vemmal*, *sõstar*, *'vahter*), cf. also section 4. In view of such developments in nominal stems, it is possible that similar assimilations have occurred also in verbal stems. Extension of the scope of vowel harmony in Estonian and Votic (except Coastal Estonian and Kukkuži Votic) included characteristically the rise of *õ* [*e*] as a result of the split of *\*e*, with *õ* in words with back vocalism, cf. 3.4. The so-called *õ*-harmony is still preserved in Kihnu and to a certain extent in Võru South Estonian. In East Vaivara, similarly to Ingrian, Finnish, and Karelian, *o* in non-initial syllables of words with front vocalism in the initial syllable was changed to *ö* (*\*näko* > *näkö* 'face'). It is possible that a similar *ö*-harmony had once existed also in North Vaivara.

In the framework of the loss of vowel harmony, in most Estonian dialects the vowels *\*e*, *\*ä*, *\*ü* of non-initial stem syllables merged with *e*, *a*, *i* (*\*pekenētek* > *põge nete* 'you (Pl) escape', *\*päivättäk* > *\*päevata* 'without a day', *\*süntüäk* > *sündida* 'to be born'). Some front vocalic allomorphs of inflectional suffixes with the vowel *\*ü* were replaced by a back vocalic allomorph: *\*sõnüt* > *sõönud* 'eaten (PsPastPl)', *\*sõitü* > *söödu(d)* 'eaten (IpsPastPl)', *\*käsküt* > *käsud* 'commands'

After the loss of vowel harmony, the vowel *\*o* merged into *u* in most Coast, North-East, North, and East Estonian dialects (*\*näko* > *nägu* 'face'); this change is later than the contraction triggered by the loss of weakened stops, cf. 3.4.4.1, Tables 13 and 14. A similar merger *\*e* > *i* seems to have occurred in a series of Middle Low German (MLG) borrowings (*'saag* 'saw'

GSg *'sae* : PSg *saagi* from MLG *sāge*, *'laadida* 'to load [a gun]' : *'laen* 'I load' from MLG *laden* 'to load'), cf. also 3.3.1. As *e*-stems of Proto-Finnic origin do not expose the stem vowel *i*, this change remains unexplained.

In North Setu and Rāpina Võru high vowels *u*, *ü*, *i* became voiceless in closed unstressed syllables preceded by a stressed syllable of Q1 or Q2 or an unstressed syllable, e.g. [*vāzŭš*] 'he tires', [*pudzu?*] 'down feathers', [*val'i?*] 'you (Sg) choose!', [*tǜrigu?*] 'girls'. Devoicing caused ambiguity or triggered the de-gemination of the preceding geminate consonant ([*vāzŭ?*] < *\*vāssü?* < *\*väsüťäk* 'to tire', [*val'i?*] < *\*val'li?* < *\*valiťak* 'to choose'). High vowels lowered in North Setu and Rāpina Võru in an unstressed syllable if preceded by a stressed syllable of Q3 or by an unstressed syllable (*'vāssö* 'he tired', *'putso* 'down feather (IllSg)', *elänöq* [*elänö?*] 'lived (PsPastPle)')

All Estonian dialects shared with other Finnic dialects the change *\*-pa* > *\*-pi* in the third person singular ending and in the nominative singular of the comparative degree forms of adjectives (*\*jōpa* > *\*jōpi* 'he drinks', *\*matalampa* > *\*matalampi* 'lower'); although in modern Estonian the quality of the vowel of these forms cannot be attested because of vowel apocope, the change can be attested in addition to Votic, Ingrian, Finnish, and Karelian evidence also in Estonian runic songs. It is problematic whether palatalization of the final resonant consonant in Võru South Estonian nominative singular forms, such as *'jummal* 'god', *'küpär* 'hat', *vassar* 'hammer', was caused by an apocopated *\*i* from the change *\*A* > *\*i* in the third syllable (Kettunen 1962, section 248) or by the later analogy of such words as *'katel* ~ *'katal* 'boiler' (from PF *\*kattila*), where the final resonant was palatalized under the influence of the preceding *\*i*.

In Mulgi South Estonian and its neighbourhood (Kõpu, Viljandi, Kolga-Jaani North Estonian, and Sangaste South Estonian), the vowels *\*a* and *\*ä* merged into *e* in the third syllable and farther.

### 3.4.4.3. Rise and shortening of long vowels

In all Estonian dialects, similarly to Livonian and Votic, long vowels resulted from (a) vowel contraction after the loss of intervocalic *\*h* and weakened stops *\*p̃*, *\*t̃*, *\*k̃*, cf. 3.3.2, and were shortened in non-initial syllables (*\*kalata* > *\*kalaťa* > *\*kalā* > *'kala* 'fish (PSg)') and (b) vocalization of the word-final *\*-n* (*\*nainen* > *\*nainē* > *naine* 'woman', *\*kalan* > *\*kalā* > *'kala* 'fish (GSg)'). In most dialects, vocalization of *\*-n* did not concern the first person singular ending of verbs; vocalization occurred without exceptions in South Estonian, Saaremaa, Hiiumaa, and East Votic and Livonian. The first change occurred also in Ingrian, Finnish, and Karelian.

Long vowels of non-initial syllables shortened in all Estonian dialects. Except in Coastal and North-East Estonian, the shortening occurred after apocope had taken place (cf. 3.4.4.1 and Tables 15 and 16). In Coastal Estonian, long vowels in non-initial syllables were still preserved in the 1870s (Weske 1877: 4–5, 10–15).

**Table 15.** Apocope and shortening of long vowels in non-initial syllables in the case forms of *\*sata* ‘hundred’ and *\*ranta* ‘coast’

The table does not take into account the lenition of non-initial stops in voiced environments as *\*t > d*.

	NSg	GSg	PSg	NSg	GSg	PSg
UNDERLYING FORM	<i>sata</i>	<i>satan</i>	<i>satata</i>	<i>ranta</i>	<i>rantan</i>	<i>rantata</i>
Suffixal gradation			<i>sataŋa</i>			<i>rantataŋa</i>
Radical gradation		<i>saŋan</i>			<i>rañnan</i>	
Polarization of long syllables				<i>rañta</i>		<i>rañtataŋa</i>
Assimilation, loss, or mutation of weakened stops		<i>sajan</i>	<i>sata<sub>ɹ</sub>a</i>		<i>rañnan</i>	<i>rañta<sub>ɹ</sub>a</i>
Contraction			<i>satā</i>			<i>rañtā</i>
Vocalization of final <i>*-n</i>		<i>sajā</i>			<i>rañnā</i>	
Apocope of final vowels				<i>rañt</i>		
Shortening of long vowels in unstressed syllables		<i>saja</i>	<i>sata</i>		<i>rañna</i>	<i>rañta</i>
ORTHOGRAPHIC FORM	<i>sada</i>	<i>saja</i>	<i>sada</i>	<i>rand</i>	<i>ranna</i>	<i>randa</i>

**Table 16.** Apocope and shortening of long vowels in non-initial syllables in the case forms of *\*mato* ‘snake’ and *\*pattu* ‘sin’

	NSg	GSg	PSg	NSg	GSg	PSg
UNDERLYING FORM	<i>mato</i>	<i>maton</i>	<i>matota</i>	<i>pattu</i>	<i>pattun</i>	<i>pattuta</i>
Suffixal gradation			<i>matoŋa</i>			<i>pattuŋa</i>
Radical gradation		<i>maŋon</i>			<i>paŋtun</i>	
Polarization of long syllables				<i>paŋtu</i>		<i>paŋtuŋa</i>
Loss of weakened stops		<i>ma<sub>ɹ</sub>on</i>	<i>mato<sub>ɹ</sub>a</i>			<i>paŋtu<sub>ɹ</sub>a</i>
Vocalization of final <i>*-n</i>		<i>ma<sub>ɹ</sub>õ</i>			<i>paŋtũ</i>	
Apocoptation of final vowels			<i>mato</i>	<i>paŋ</i>		<i>paŋtu</i>
Shortening of long vowels in unstressed syllables		<i>ma<sub>ɹ</sub>o</i>			<i>paŋtu</i>	
Fusion of vowel-initial post-tonic syllables		<i>maõ</i>				
<i>*o &gt; u</i> in non-first syllables	<i>matu</i>		<i>matu</i>			
ORTHOGRAPHIC FORM	<i>madu</i>	<i>mao</i>	<i>madu</i>	<i>˘patt</i>	<i>˘patu</i>	<i>˘pattu</i>

### 3.4.5. Diphthongs in non-initial syllables

In Proto-Finnic diphthongs ending in *\*i* occurred both in secondarily stressed syllables and unstressed syllables. In Harjumaa, Järvamaa, and Virumaa North Estonian and in Standard Estonian, diphthongs occur (1) in secondarily stressed syllables and (2) in unstressed syllables, only when preceded by an initial syllable of Q3. Such diphthongs mostly occur in the so-called *i*-plural forms, first of all in the partitive case, sometimes also in superlative adjectives and adverbs. The superlative was introduced into Estonian following the example of Finnish. One part of diphthongs in plural forms may result from vowel contraction after an intervocalic *\*i*, *\*k̃* or *\*h* was lost at the onset of the third syllable (cf. *\*kuniṅkahillen* > *\*kuniṅkaille* > *'kunin* 'gaile 'to kings (AllPl)', *\*kerkeṛäitä* > *\*kerkeṛitä* > *'kergeid* 'light; easy (PPl)'). Another part of plural forms with a diphthong in a non-initial syllable (e.g. *'jumalaid* 'gods (PPl)', AllPl *'juma* 'laile; *südameid* 'hearts (PPl)', AllPl *süda* 'meile; *'hobuseid* 'horses (PPl)') is usually considered to result from analogy (Kettunen 1962: 176, 183; cf. also Rätsep 1979: 5), probably erroneously. In South Estonian, and locally in Coastal and North Estonian, diphthongs are retained under secondary stress in nominal suffixes *\*-lAinen* *\*-lAis(e)-*, *\*-mAinen* : *\*-mAise-* and *\*-kAinen* : *\*-kAis(e)-*, mostly in plural forms, in Vaivara Coastal Estonian also in the singular (*ülimäine* 'upper', *linnukaine* 'little bird').

All diphthongs of unstressed syllables in Standard Estonian occur only after a syllable of Q3 and result from the contraction of syllables including a former secondarily stressed syllable. All former diphthongs of unstressed syllables have developed into monophthongs. This development led to the overlap of singular and plural forms of *\*o*- and *\*u*-stems but not the nominative and the genitive. To avoid the overlap, complicated strategies were used, cf. Table 20. After a short initial syllable diphthongs in the second syllable after a syllable of Q1 are preserved or, more likely, restored only in the border area of Jõelähtme and Kuusalu in plural partitive forms (*'külaid* 'villages', *nimeid* 'names'), cf. Saareste 1955a, Map 90.

### 3.5. Tendencies in the development of the consonant system

In Proto-Finnic, consonants did not form contrastive pairs as to their quantity although syllable-initial single consonants could be contrasted to geminates on syllable boundaries. After the 13<sup>th</sup> century, as a consequence of vowel apocope and syncope, the consonant system was thoroughly reformed. After the loss of syllabic vowels in open unstressed syllables the former prevocalic

geminate consonants were re-interpreted as long consonants in their new word-final or pre-consonantal positions and contrasted to the corresponding short consonants. At the same time apocope and syncope of the vowel *\*i* may have given rise to palatalized consonant phonemes in Estonian or at least in North Estonian. In those dialects without palatalized consonant phonemes the loss of *\*i* could take place as a fusion of *\*i* and the preceding consonant or consonant cluster or trigger the phonemization of palatalized allophones of consonants, cf. 3.5.1. And yet the tradition of reconstructing Late Proto-Finnic without any palatalized consonants, as supported by Ingrian, Finnish, Coastal and North-East Estonian, is not supported by Livonian and Veps data and is problematic for South Estonian and even for Votic and some western North Estonian dialects (Viitso 2001a: 200–202).

### 3.5.1. Palatalization and depalatalization

Except in Hiiumaa, the coastal region of the north-western mainland, North-East Estonian and most of Coastal Estonian, consonants may be palatalized.

There exist important phonetical differences in the realization of palatalization. In Võru South Estonian, palatalization occurs throughout a single consonant or a consonant cluster and, especially if word-final, may have a *j*-coloured outset, cf. [ku<sup>̃</sup>l̥] ‘hawk’, GSg [ku<sup>̃</sup>l̥li], PSg [ku<sup>̃</sup>l̥li]. In East Vaivara Coastal Estonian the same is true for the palatalized geminates *śś*, *ll*, *rr* from *\*sj*, *\*lj*, *\*rj* (*aśśa* ‘thing’, *pallo* ‘many, much’, *marra* ‘berry’) where there are no other palatalized consonants.

In most North Estonian mainland dialects and in East Estonian, a palatalized consonant is characteristically pre-palatalized, i.e. palatalization focuses on the beginning of the first postvocalic consonant, cf. [ku<sup>̃</sup>l̥] ‘hawk’, GSg [ku<sup>̃</sup>l̥li], PSg [ku<sup>̃</sup>l̥li]. As there exists no general agreement how to distinguish this kind of palatalization from the former type, the subscript is used in this section. Note that the traditional transcription of palatalization is misleading for the letters <*t*> and <*l*>.

There is a tradition to speak about epenthetic palatalization and the epenthetic vowel <sup>i</sup> in Mulgi and Tartu South Estonian, on the western islands except Hiiumaa and on the West Estonian coast. In such cases the most characteristic feature is an overshort <sup>i</sup> or, in Muhu, an overshort <sup>e</sup> that follows any vowel that is not *i* or *ii* before a palatalized or, more often, an unpalatalized consonant, cf. [ku<sup>i</sup>l̥] ‘hawk’. In one part of the area such an overshort <sup>i</sup> or <sup>e</sup> occurs only after an underlying short monophthong. An underlying long back monophthong has been shortened and is followed by *e* from *\*i* (*paet* ‘boat’, *koel* ‘school’ vs. PSg *paati*, *kooli*). In Muhu, eastern Saaremaa, and Kihnu,

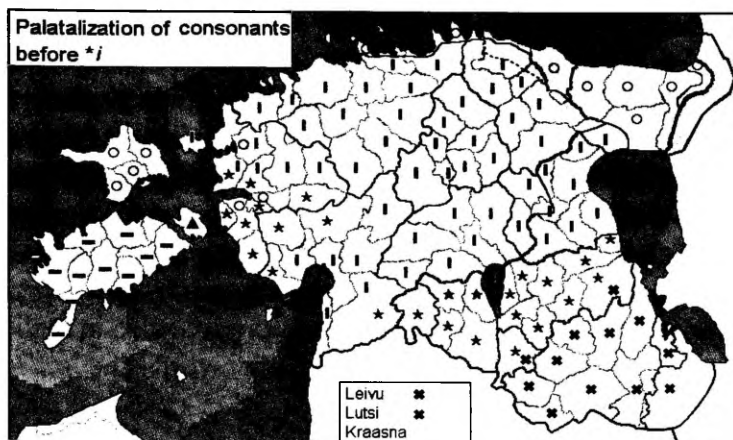
where long *aa* and *oo* were broken into *oa* ~ *ua* and *uo*, the interrelations between diphthongs and *\*i* or *e* from *\*i* vary. In Muhu, the initial component of the broken diphthong has been shortened before *e* from *\*i* (*poaet* [*p<sup>o</sup>aei*], *'kuoel* [*k<sup>o</sup>oèl*] vs. PSg *poati*, *'kuoli*). In eastern Saaremaa the second component of the diphthong and in Kihnu, the second component of a diphthong and *\*i* fuse (Saaremaa *paet* 'boat', *'koel* 'school' and Kihnu *puät*, *'kuõl* [*kuèl*] vs. PSg *poati*, *'kuoli*).

Structurally palatalization in Estonian dialects is mostly either (a) regressive partial assimilation of consonants with the following *\*i* or *\*j* or (b) fusion of consonants with the following *\*i* or *\*j*. Fusion of consonants with the following *\*i* is connected with apocope and syncope of *\*i* in the framework of general apocope and syncope of vowels in unstressed syllables, cf. 3.4.4.1. Usually palatalization has occurred only after a stressed syllable, in Võru South Estonian, however, also at the end of an unstressed syllable (*'jummal'* 'god'). The assimilated former final component *i* of diphthongs in syllables of Q2 has caused progressive palatalization of the following consonant scattered in North and South Estonian, cf. Kolga-Jaani *eeñad* 'hay (NPI)' < *\*heinät*, Võru *'haañaq* 'hay (NPI)' < *\*hainat*. Similarly, in Võru the lost *\*i* caused palatalization e.g. in *\*kattila* > *'katel'* ~ *'katal'* 'boiler', cf. also Livonian *katlā*.

In a series of words with a diminutive or pejorative meaning, e.g. *'kutsu* 'doggy', *'notsu* 'piggy', *'jätku* 'bunny', the postvocalic dental is usually palatalized. Such cases as well in several school slang terms such as *mata* 'maths' and *venna* 'Russian language' are considered to stem from child language. In addition, some nouns with *a*-stems from former *\*ä*-stems are palatalized scattered around Estonia (*'selg* 'back', *'nälq* 'hunger', more rarely *'kül'm* 'cold', cf. [*sełg*], [*näl'g*], [*kül'm*]). It is unclear whether this palatalization results from child language, from progressive or regressive assimilation ([*kül'm*] < *\*kül'mä*), or may have resulted from analogy with dialectal pronunciation of such weak-grade forms as GSg *'selja* from *'selg* 'back', cf. [*sełja*] ~ [*seł'la*] ~ [*sełla*] ~ [*se'lla*].

On the one hand, palatalization in a dialect (a) either remains within the scope of dental consonants (West Saaremaa and northern mainland dialects of North Estonian and East Estonian) or (b) includes in addition to dentals also labials, velars and *h*. On the other hand, palatalization may have taken place either (a) before both the lost and the retained *\*i* of an unstressed syllable (northern mainland dialects and partially also Kihnu of North Estonian, East Estonian, and Võru South Estonian) or (b) only before the lost *\*i* of an unstressed syllable (elsewhere, except Hiiumaa), cf. Figure 18.

In Võru all consonants except the laryngeal stop and *j* can be palatalized before both the preserved and lost *i*. Palatalization in Võru is (a) partially



**Figure 18.** Consonant palatalization before *\*i*  
in Estonian dialects

**Key:** ○ no palatalization; ✕ palatalization of most consonants and consonant clusters both before retained and lost *i*; | palatalization of the initial part of dental consonants both before existing and lost *i*; — palatalization of dental consonants only before lost *i*; ★ palatalization of the initial part of all consonants before lost *i*; ▲ palatalization of most consonants before lost *i*.

historical, e.g. the scope of palatalization in clusters in *vašk* [vašk] ‘copper’ and *vašk* [vašk] ‘calf’ reflects the former position of *\*i* in the two stems, cf. *\*vaski* and *\*vasikka*, and (b) to a great extent morphological (‘and’ ‘he gives’ ‘and’ ‘he gave’); in addition, (c) consonant clusters ending in *j* in the strong grade have fused into single palatalized consonants in the weak-grade forms (‘ahjo’ ‘heating stove (PSg)’ : GSg ‘ahjo’) (Viitso 1990: 170–171).

Even if first positionally conditioned, palatalization is not automatic, cf. e.g. [tuɲɔ] ‘hour’ : PSg [tuɲdi] vs. [ploɲɔ] ‘blond’ PSg [ploɲdi]. During the 20<sup>th</sup> century the palatalized *ɲ* as well palatalization of consonants after a long vocalism have become rare throughout North Estonian. Local and individual variation of palatalized and unpalatalized forms is mostly conditioned by different models of palatalization and gradual loss of palatalization, cf. Table 17. The so-called epenthetic vowels *i*, *e* and *e* have nothing to do with epenthesis. At least in Saaremaa, Muhu, and Kihnu they result from the fission of former palatalized consonants into a front, i.e. palatal vowel and an unpalatalized consonant. In other words, there is no consonant palatalization any more in the area. The same could be true for Mulgi and Tartu South Estonian, the truth can be established only by an instrumental study. Anyway, even the pre-palatalization in northern North Estonian is a first step towards de-palatalization.

Palatalization before *\*i* and *\*j* are different processes; moreover, even different consonant clusters *\*tj*, *\*kj*, *\*sj*, *\*hj*, *\*lj*, *\*rj* have behaved differ-

ently. In most dialects *\*kj* has rendered *\*jj* that has been either totally or partially vocalized (*\*lakja* > *\*lajja* > *lai* 'broad'), *\*sj*, *\*lj* and *\*rj* are locally fused into *\*śś*, *\*ll'* and *\*rr'* (East Vaivara Coastal Estonian *pal'lo*) and then mostly fissioned into *śś* (*\*asjat* > *aśśad* 'things', *\*paljon* > *pal'lo* ~ *pa'llu* 'much, many'). In central and southern North Estonian *l'* in *ll'* fissioned to *il* (*pal'lo* ~ *pa'llu* > *\*paillo* ~ *\*paillu*) and the geminate *ll* underwent the general de-gemination of resonants after a long vocalism (*\*paillo* ~ *\*paillu* > *pailo* ~ *pailu*). (It is possible that the starred forms *\*paillo* ~ *\*paillu* that are here needed for a step-by-step reconstruction exist also in reality; unfortunately there are no instrumental data on whether words like *pa'llu* actually represent pre-fissional forms of the type [*paʎlu*] or post-fissional forms of the type [*paĩllu*]).

**Table 17.** Two models of palatalization  
and de-palatalization of consonants after a long vocalism:  
development of the nominative singular form *\*kōli* 'school'  
in Central North Estonian (A) and Insular North Estonian (B).  
Unstarred forms are attested forms

	A	B
UNDERLYING FORM	<i>*kōli</i>	<i>*kōli</i>
Palatalization before <i>*i</i>	<i>*kōl'i</i>	
Vowel shortening in open syllables after a long stressed syllable		<i>*kōl'ĩ</i>
Apocope and compensatory lengthening of the first syllable	<i>*kōl'</i>	
Fusion <i>*Cĩ</i> > <i>Ć</i> and compensatory lengthening of the first syllable		<i>*kōl'</i>
Palatalization shift <i>*Ć</i> > <i>ċ</i>	<i>kōċl</i>	
Fission of <i>*Ć</i> into <i>i</i> C		<i>kō<sup>i</sup>l</i>
Lowering of <i>i</i> to <i>e</i> after a non-high vowel		<i>*kō<sup>e</sup>l</i>
Merger with a general quantity pattern		<i>koèl</i>
De-palatalization	<i>kōl</i>	

### 3.5.2. Weakening of single obstruents

In voiced environments, single obstruents *\*p*, *\*t*, *\*k*, *\*s* became lenis consonants [*B*, *D*, *G*, *Z*], written as *b*, *d*, *g*, *s*, except word-initially: *saba* 'tail', *tubli* 'able, capable', *kurb* 'sad'; *udu* 'fog', *vedru* '(metal) spring', *lind* 'bird'; *nägu* 'face', *taglas* 'rig', *king* 'shoe'; *isa* 'father', *rasvane* 'fat (adj.)', *kõrs* 'stalk, straw'. Lenition of single obstruents took place after the weakened obstruents in weak-grade forms mutated, assimilated, or were lost.

### 3.5.3. Gemination of single consonants

Gemination of single consonants concerns single consonants at the onset of the 2<sup>nd</sup> syllable in an originally at least trisyllabic word whose 3<sup>rd</sup> syllable (a) began in an intervocalic *\*h*, (b) began in a now lost weakened intervocalic stop *\*ĩ* or *\*ķ*, or (c) was formerly final and open and later subject to apocope.

A. In most Estonian dialects, including Standard Estonian, single intervocalic consonants were geminated after a short stressed syllable if followed by a vowel preceding an intervocalic *\*h*: (a) in illative-2 singular, cf. *küla* 'village' : *külla* (< *\*külāhen*), *maja* 'house' *majja* (< *\*majāhen*), *tuba* 'room' *tuppa* (< *\*tupāhen*); (b) in strong-grade forms of some noun stems, cf. *\*okahan* > *okka* 'thorn (GSg)', *\*rukihišta* > *rukkist* 'from rye (ElaSg)', *\*ikehen* > *ikke* 'yoke (GSg)', *\*tekehen* > *tõkke* 'barrier, obstacle (GSg)'. Characteristically, the forms with geminated consonants are of Q3; obviously gemination took place as a counterbalance to the following long monophthong that resulted from contraction after *\*h* was lost. In western North Estonian and South Estonian a similar gemination occurs also in some other cases, e.g. in the third person singular forms of the imperfect forms of verbs. Gemination did not take place in Coastal and North-East Estonian (cf. Must 1987: 56), except in East Vaivara (*vene* < *\*veneh* 'boat' : GSg *venne* < *\*vennē* < *\*venehen*).

B. In western North Estonian and in South Estonian and East Vaivara, the loss of intervocalic *\*ĩ* and *\*ķ* after an unstressed syllable and the subsequent vowel contraction triggered gemination of the single consonant at the beginning of the second syllable. Characteristically, the western North and South Estonian forms with such a geminate are of Q2: *\*makatan* > *maka* [*makka*] 'I sleep', *\*pimeĩä* > *pimme* 'dark; blind', *\*kalaĩa* > *kalla* 'fish (PSg)', *\*kaloĩta* > *kallo* 'fishes (PPI)'

C. In East Vaivara, the loss of intervocalic *\*p̃* after an unstressed syllable and the subsequent vowel contraction triggered gemination of the single consonant at the beginning of the second syllable if preceded by a short stressed

syllable in the third person forms of the present and, rarely of the imperfect indicative (\**pitäpi* > \**pitā* > \**pittā* > *pittā* 'he must', \**pitäpät* > \**pitāt* > \**pittāt* > *pittād* 'they must', \**tulepi* > \**tuloṗi* > \**tulō* > \**tullō* > *tullo* > *tullo* 'he comes', \**tulepat* > \**tuloṗat* > \**tulōt* > \**tullōt* > *tullod* 'they come'). Similar gemination occurred also in Ingrian and the southern and eastern South-East Finnish dialects (Laanest 1986: 125, 127, Leppik 1975: 38).

D. In former trisyllabic words whose all syllables were open, the onset consonant of the second syllable is geminated in South Estonian (\**otava* > *otav* [oṭtāv] 'cheap', \**jumala* > *jummal* 'god', cf. the corresponding GSg forms \**otavan* > *odava*, \**jumalan* > *jumala*). A similar alternation of the geminated nominative form with de-geminated other forms occurs also in Soikkola Ingrian, cf. *jummaala* : *jumalan*. Hence, it is conceivable that the vowel was lengthened before the gemination, whereas after the gemination the long vowel was shortened and the final short vowel was subject to apocope. In that case it is possible that type A consists of two subtypes one of which captures forms with an open third syllable and was subject to gemination similarly to type C.

### 3.5.4. De-gemination

In all Estonian dialects, geminate consonants were simplified after a long monophthong, diphthong, or a resonant on the border of a syllable of Q2 (\**sāppas* > *saabas* 'boot', \**sāitan* > *saadan* 'I send', \**kēlōt* > \**kēllot* > *keelud* 'bans (NPl)', \**mārtek* > \**mārre(k)* > *määre* 'grease', \**peittä* > *peidan* 'I hide', \**kuřkkut* > *kurgud* 'throats'). According to Huno Rätsep (1989: 1513), this change took place in the 15<sup>th</sup> century. Geminate resonants were de-geminated also after the second syllable and farther (\**matalamṗallen* > \**matalamṗalle(n)* > *mada'lamale* 'lower (AllSg)').

It is possible that there have been two different kinds of de-gemination: (1) de-gemination of weakened geminate stops as in Coastal Estonian, Votic, Ingrian and Finnish, Karelian and North Veps and (2) de-gemination of geminate resonants. A weak point of this possibility is that elsewhere in Finnic the de-gemination of geminate stops has included first of all geminate stops preceded by a short monophthong, cf. also Laanest 1982: 138.

Note that geminate stops were not de-geminated in genitive plural forms (*küünte* 'nails (GPl)' and *varte* instead of otherwise expected \**küñiten* > †*küünde* and \**variten* > †*varde*), in abessive (*maata* instead of \**māttak* > †*maada*), and in the second person plural ending (*saate* 'you (Pl) get', *võite* 'you (Pl) may' instead of \**sāitek* > †*saade*, \**veiitek* > †*võide*), obviously for morphological reasons, cf. 3.3.1 and Table 5.

### 3.5.5. Other consonant changes

Several important changes were presented or discussed earlier in connection with certain consonant clusters whose development is not in accordance with the accepted borders of Finnic languages, notably *\*kt* (2.1.9, 2.3), *\*pć* (2.3), *\*kn* (2.3), *\*tn* (2.3.2), *\*str* (2.3.5, 2.3.5.1).

Especially important is the loss of final *\*-n*, *\*-k*, and *\*-h* as the first two were very productive in suffixes.

The consonant *\*-n* was lost both stem-finally (*\*nainen* > *naine* 'woman; wife', *\*kümmen* > *kümme* 'ten') and suffix-finally (*\*mere/n* > *mere* 'sea' (GSg), *\*mere/hen* 'into the sea' (IIIsg)). In Coastal, North-East, East, and most North Estonian and in West Votic *\*-n* has been exceptionally preserved in 1Sg (*\*elän* > *elan* 'I live') but lost in South Estonian, Saaremaa, Hiiumaa, Pärnumaa, southern Läänemaa, East Votic and Livonian. *\*-n* was still retained at the first half of the 13<sup>th</sup> century and probably lost in the 14<sup>th</sup>–15<sup>th</sup> century.

The final *\*-k* is lost everywhere in Estonian (*\*elätäk* > *elada* 'to live'), except in Võru South Estonian where *\*-k* is represented as a laryngeal stop. As there are no traits of *\*-k* in the earliest Estonian texts, but the words with the former *\*-k* nevertheless were not subjected to vowel apocope, then it is possible that even in North Estonian *\*k* was first shifted to the laryngeal stop (Rätsep 1989: 1511–1512). Similarly, *\*-h* has been lost everywhere (*\*terveh* > *terve*), except in Võru (*\*hõneh* > *hõnēh* 'building').

Even the final *\*-t* is usually lost in some words in most North Estonian dialects (*\*neitsüt* > *neitsi* 'virgin', (*\*olut* > *\*elut* > *õlu* 'beer').

Unlike other Estonian dialects, in South Estonian final single obstruents are lengthened, if retained, cf. *elät* < *\*elät* 'you (Sg) live', *katuss* < *\*kaītus* 'roof'

Syllable-final *\*k*, if followed by *\*l* or *\*r*, has been vocalized in North Estonian mostly to *e*: *\*kakla* > *kael* 'neck', *\*sekla* > *sõel* 'sieve', *\*kakra* > *kaer* 'oats', *\*mäkrä* > *määr* 'badger' (in Standard Estonian instead of *määr*, the South Estonian *mäger* has been accepted). In Coastal and North-East Estonian, similarly to Finnish, the syllable-final *\*k*, *\*t*, and *\*p* were vocalized to *u* (*kaul(a)*, *seul(a)* ~ *Vaivara siul(a)*, *kaur(a)*, *mäur(a)*; *aur(a)* < *\*atra* 'plough'). In South Estonian, clusters beginning in *\*t* and *\*p* have been preserved; clusters beginning in *\*k* have been preserved only locally in the Võru area. In the nominative singular several strategies were applied to solve the contradiction dictated by the vowel apocope in the second syllable and the violation of the principle of diminishing sonority in the direction of syllable outset, cf. Figure 17

#### 4. Stem types and alternations

After the change *\*e > \*i* in Early Proto-Finnic, nominals had from one to three and temporarily even four stems, and verbs had at most three stem allomorphs. All nominals and verbs had already in Pre-Finnic a vocalic stem, and one part of *\*e*-stems had also a shorter consonantal stem (Bussenius 1939). In Early Proto-Finnic the number of stem variants was increased because of two changes: (a) the word-final *\*e* changed to *\*i*, and the heteromorphemic sequence *\*ei* was assimilated to *\*ī*, cf. Tables 18 and 19. The following changes, e.g. *\*ti > \*si*, *\*s > \*h* after non-initial syllables, simplification of consonant clusters, changes of diphthongs in non-initial syllables, shortening of long vowels in non-initial syllables, increased the rate of stem variation, non-predictability of the inflectional type and opacity of morphological forms, cf. Figure 19. Still the total number of possible stem variants in a paradigm was not increased before the rise of gradation, although the change *\*Vhe > \*VhV* increased variability among case formatives.

**Table 18.** Early Finnic nominal *\*e*-stem types

	Stem vowel			Examples			
	NSg	GSg	PSg	NSg	GSg	PSg	Gloss
(1)	<i>*i</i>	<i>*e</i>	Ø	<i>*lumi</i> <i>*lēmi</i>	<i>*lume/n</i> <i>*lēme/n</i>	<i>*lum/ta &gt; *lun/ta</i> <i>*lēm/tä &gt; *lēn/tä</i>	'snow' 'broth'
(2)	<i>*i</i>	<i>*e</i>	<i>*e</i>	<i>*nimi</i> <i>*tammi</i>	<i>*nime/n</i> <i>*tamme/n</i>	<i>*nime/tä</i> <i>*tamme/ta</i>	'name' 'oak'
(3)	Ø	<i>*e</i>	Ø	<i>*kastek</i>	<i>*kasteke/n</i>	<i>*kastek/ta</i>	'dew'

**Table 19.** Early Finnic verb *\*e*-stem types

	Stem vowel		Examples		
	Pr1Sg	Inf	Pr1Sg	Inf	Gloss
(1)	<i>*e</i>	Ø	<i>*teke/n</i>	<i>*tek/täk &gt; *teh/täk</i>	'to do'
(2)	<i>*e</i>	<i>*e</i>	<i>*luke/n</i>	<i>*luke/tak</i>	'to read; to count'
(3)	<i>*e</i>	Ø	<i>*ompele/n</i>	<i>*ompel/tak</i>	'to sew'

Radical gradation created a new, weak-grade vocalic stem variant in addition to the already existing disyllabic and tetrasyllabic vocalic stems. Loss of weakened single stops in weak-grade disyllabic and trisyllabic vocalic stems, and the following contractions and fusions, loss of final *\*-n*, *\*-k*, and *\*-h*, reanalysis and analogy, competing models of plural and imperfect stem formation added stem variation in Estonian. As a result, in Standard Estonian nouns and verbs have 1–6 stem variants with numerous paradigmatic distribution types.

	Nominative Sg	Genitive Sg	Partitive Sg
A.	<i>*terveh</i>	<i>*tervehen</i>	<i>*tervehtä</i>
B.	<i>*kirves</i>	<i>*kirvehen</i>	<i>*kirvestä</i>
C.	<i>*tarvas</i>	<i>*tarvahan</i>	<i>*tarvasta</i>
	<i>*tervas</i>	<i>*tervaksen</i>	<i>*tervasta</i>

**Figure 19.** Non-predictability of the inflectional type in Late Proto-Finnic: case forms of *\*terveh* ‘healthy’, *\*kirves* ‘axe’, *\*tarvas* ‘aurochs’ and *\*tervas* ‘tar-yielding wood’, belonging to three morphological types A–C

## 5. Number

Most nominals and personal finite verbs have singular and plural forms. In Finnic, singular forms are unmarked for number; plural forms are or at least have been marked for number.

In Early Proto-Finnic, nominals were marked for plural by *\*-i* in all cases except the nominative, where the pluralizer *\*-t* was used. It is possible that the genitive plural originally had no case ending and the pluralizer *\*-i* without a following case suffix served to distinguish the genitive plural form from the other forms of the paradigm. After genitive plural forms had received also the genitive ending *\*-n*, the case forms with the pluralizer *\*-i* developed in four directions, depending on changes that occurred in (a) *\*-Viñen* in the genitive plural, (b) *\*-Vita* or *\*-Viñä* in the partitive plural, (c) *\*-Vihen* > *\*-Vihin* in the illative plural and (d) *\*-ViC* in all the other adverbial cases, where *\*V* is the original stem vowel and *C* a syllable-final consonant that actually did not influence the sequence *\*Vi*. In several nominal types of Standard Estonian forms with the pluralizer *\*-i* are impossible, and in many cases only the partitive plural form is regular (for *\*-Vita* > *-Vid*) or at least accepted. Genitive plural forms of the type are unacceptable. In other cases forms with the pluralizer *\*-i* are represented in modern Estonian as forms of the stem plural, cf. Table 20, or the *i*-plural. If the vocalic stem was originally mono- or trisyllabic, the sequence *\*Vi* is represented by a diphthong and we have what is called the *i*-PLURAL (*‘südameis* ‘in the hearts (InePl)’, *hambaile* ‘to the teeth (AdePl)’).

**Table 20.** Heteromorphemic sequences of the stem vowel and the pluralizer *\*i* in unstressed second syllables

**Examples:** partitive plural forms *\*siliüä* > *siile* 'hedgehogs'; *\*käsküüä* > *käske* 'commands'; *\*lauluüä* > *laule* 'songs'; *\*peltoüä* > *peltoüä* > *põlde* 'fields'; *\*sarveüä* > *sarvi* 'antlers'; *\*silmäüä* > *silmi* 'eyes'; *\*päiväüä* > *päevi* 'days'; *\*tühjäüä* > *tühje* 'empty (PPl)'; *\*seinäüä* > *seinu* 'walls'; *\*konnäüä* > *konni* 'frogs'; *\*orjäuä* > *orje* 'slaves'; *\*munäüä* > *mune* 'eggs'; *\*korväuä* > *kervoiä* > *kõrvu* 'ears'

UNDERLYING VOWELS	<i>i+i</i>	<i>ü+i</i>	<i>u+i</i>	<i>o+i</i>	<i>e+i</i>	<i>ä+i</i>			<i>a+i</i>		
Contraction	<i>ī</i>	<i>üi</i>	<i>ui</i>	<i>oi</i>	<i>ei</i>	<i>äi</i>	<i>äi</i>	<i>äi</i>	<i>ai</i>	<i>ai</i>	<i>ai</i>
<i>oi</i> > <i>ei</i>				<i>ei</i>							
<i>*ai</i> > <i>*oi</i> <sup>1</sup>											<i>oi</i>
<i>*ai</i> > <i>*ei</i> <sup>2</sup> <i>*äi</i> > <i>*ei</i>						<i>ei</i>	<i>ei</i>	<i>ei</i>	<i>ei</i>	<i>ei</i>	
<i>*üi</i> > <i>*ī</i> <sup>3</sup>		<i>ī</i>									
<i>*ei</i> > <i>*oi</i> <sup>4</sup>								<i>oi</i>			
<i>*ei</i> > <i>*ī</i>					<i>ī</i>	<i>ī</i>	<i>ī</i>		<i>ī</i>	<i>ī</i>	
<i>*ei</i> > <i>*ei</i>				<i>ei</i>							
Monophthongization <sup>5</sup>			<i>u</i>	<i>e</i>				<i>o</i>			<i>o</i>
Shortening	<i>i</i>	<i>i</i>			<i>i</i>	<i>i</i>	<i>i</i>		<i>i</i>	<i>i</i>	
<i>*i</i> > <i>*e</i> <sup>6</sup> <i>*u</i> > <i>*e</i>	<i>e</i>	<i>e</i>					<i>e</i>			<i>e</i>	
<i>*o</i> > <i>u</i>							<i>u</i>				<i>u</i>
ORTHOGRAPHIC FORM	<i>e</i>	<i>e</i>	<i>e</i>	<i>e</i>	<i>i</i>	<i>i</i>	<i>e</i>	<i>u</i>	<i>i</i>	<i>e</i>	<i>u</i>

**Notes.** <sup>1</sup> After *\*a*, *\*i*, and *\*e* in the first syllable. <sup>2</sup> After *\*u* and *\*o* in the first syllable. <sup>3</sup> In the framework of unrounding of *\*ü* in non-first stem syllables. <sup>4</sup> After *\*elj* and *\*älj* and after *\*ī*, *\*ei*, and *\*äi* in the initial syllable. <sup>5</sup> The change affected only the unstressed syllables. <sup>6</sup> The change had the functions to prevent (a) the rise of the sequences *†ji* and *†i,i* in *\*ä*- and *\*a*-stems and (b) the overlapping of singular and plural partitive forms of *\*i*-, *\*ü*-, and *u*-stems.

If the vocalic stem was disyllabic or tetrasyllabic, the components of *\*Vi* were fused with each other and we have what is called the STEM PLURAL ('*kõrvus* 'in the ears (InePl)', cf. '*kõrvas* 'in the ear (IneSg)'; '*sarvist* 'from the antlers (ElaPl)', cf. '*sarvest* 'from the antler (ElaSg)'), cf. Table 20. It is likely that a series of *\*ä*-stems with *\*ī*, *\*ei*, or *\*äi* in the initial syllables (*\*pīmā* 'milk', *\*heinā* 'hay', *\*seinā* 'wall', *\*vāinā* 'strait') either had not substituted their stem vowel *\*ä* for the earlier stem vowel *\*a* yet, or had substituted their modern stem plural vowel for *\*i* under the influence of the historical *\*a*-stems. For gradational stems, the stem plural forms of adverbial cases of group (d) are in the weak grade.

### 5.1. The *i*-plural

Except for monosyllabic stems, the Estonian *i*-plural forms are considered secondary relying on the authority of Lauri Kettunen. Another part of plural forms with a diphthong in a non-initial syllable (e.g. *'jumalaid* 'gods (PPI)', AllPI *'juma`laile*; *südameid* 'hearts (PPI)', AllPI *süda`meile*; *'hobuseid* 'horses (PPI)') are considered to result from analogy (Kettunen 1962: 176, 183). In fact, there exists no formal proof of the secondary nature of the diphthongs in the Standard Estonian forms *'jumalaid* and *'hobuseid* as compared with their dialectal correspondences *'jumalid* ~ *'jumali* and *'obusid* ~ *'obusi* or Finnish correspondences *jumalia* and *hevusia*, which anyway come from *\*jumalaita* and *\*hepo(i)seita*. Hence the diphthongs in such Estonian forms may at least partially be original: the Veps partitive plural forms such as *lühuzid* (< *\*lühüsitä* < *\*lühütitä* < *\*lühüteitä* 'short (PPI)', cf. NPI *lühuded*), witness that monophthongization of the diphthong *\*ei* in secondarily stressed syllables may be older than the change *\*ti* > *\*si*. As the Estonian partitive plural forms of the former *\*ut*-/ *\*üt*-stems are very problematic, it is not entirely impossible that the diphthong *ei* in plural forms of *e*-stems has been restored on the example of *a*- and *u*-stems. Still in view of the existence of consonantal stems in the paradigm, cf. PSg *südant*, *'(h)obust*, the innovational PPI forms *südamid*, *'(h)obusid* were transparent enough to make the restoration highly unnecessary. The diphthongal *eid*-forms became prestigious only with the orthographic dictionary (EKÖS 1918); up to that time *id*-forms were preferred.

### 5.2. The stem plural

In most North Estonian dialects the stem plural forms of local cases were retained only as adverbs or as used in fossilized phrases; this situation is well reflected in the literary language of the beginning of the 20<sup>th</sup> century. In literary language the stem plural was restored on the basis of plural adverbs and South Estonian and is used first of all in the partitive plural. In other case forms the usage of the stem plural depends on style, person, and the presence of more frequent homonyms. The development of stem vowels in plural stems depends on the stem vowel in singular forms and for *\*a*- and *\*ä*-stems also on the vocalism of the initial syllable or of the preceding consonant, cf. Table 17. The plural stem vowel formation is mostly contrastive: for high stem vowels *\*u*, *\*ü*, *\*i* the plural stem vowel is the mid vowel *e* (*\*lintu* 'bird', PPI *linde*; *\*mürkkü* 'poison', PPI *mürke*; *\*kulli* 'hawk', PPI *kulle* [*ku`lle*]), for the stem vowel *\*o* the illabial *\*e* (*\*orko* 'valley', PPI *orge*), for the mid vowel *\*e* the high vowel *\*i* (*\*hejke*-, PPI *hingi*). For *\*ä*- and *\*a*-stems the

choice of the plural stem vowel depends on several factors. If the stem vowel *\*ä* was preceded by *\*j*, the plural stem vowel is the mid vowel *e* for the high labial vowel *ü* in the initial syllable (*\*tühjä* ‘empty’, PPl *tühje*), and *u* for the mid or low vowels *\*e* and *\*ä* in the initial syllable (*\*väljä* ‘field’, PPl *välju*; *\*äjjä* ‘father-in law’, PPl *äiu*); elsewhere the plural stem vowel for *\*ä*-stems is the high vowel *i* (*\*silmä* ‘eye’, PPl *silmi*; *\*külmä* ‘cold’, PPl *külmi*). If the stem vowel *\*a* was preceded by an initial syllable that contained a labial vowel *\*u* or *\*o*, the plural stem vowel developed into *e* if the initial syllable was short or the labial vowel was followed by a cluster ending in *\*j* (*\*nuka* ‘knife’, PPl *nuge*; *\*nujja* ‘club; ram; baton’, PPl *nuie*). Otherwise the plural stem vowel for labials in the initial syllable is *\*i*. If the stem vowel *\*a* was preceded by an initial syllable containing an illabial vowel, the plural stem vowel is the high labial vowel *u* (*\*ilma* ‘weather’, PPl *ilmu*; *\*elka* ‘shoulder’, PPl *õlgu*); note that the plural stem vowel *u* is more recent than all the mergers of *\*o* into *\*e* in Estonian, cf. *\*olka* > *\*elka*.

In South Estonian, East Estonian, and especially in Coastal and North-East Estonian, the genitive plural forms in *\*-Viñen* have a series of reflexes that have been generalized also to adverbial cases; for disyllabic gradational stems, all such forms are in the strong grade, cf. 6.1. Similar strong-grade plural forms occur also in Votic, Ingrian, and in Finnish of Narvusi, islands in the Gulf of Finland, and South-East Häme (Alvre 1968, 1970).

### 5.3. *de-plural* and *e-plural*

In most Estonian dialects the pluralizer *\*-t* in nominative plural forms is retained as *-d*. The Võru South Estonian laryngeal stop *-q* may also come from *\*-t*, although the underlying form *\*-k* was proposed by Paul Ariste (1947b). As there existed also noun stems ending in a diphthong, new plural patterns appeared, based on the nominative plural: the genitive ending *\*-n* was added to the nominative plural form. As final consonant clusters were not accepted, an epenthetic vowel *\*e* was inserted. The sequence *\*-te* in the formative *\*-ten* was analysed as the pluralizer in all plural forms, except the nominative and the partitive. In Standard Estonian the pluralizer *\*-te* is represented mostly as the so-called *de-PLURAL* (cf. Alvre 1970: 457 and below 6.1 for later developments of *\*-ten*). Still in western Saaremaa, eastern Hiiumaa, western mainland Estonia, and in some cases even in Standard Estonian, the development of the same pluralizer led to the rise of *e-PLURAL* of nominals with a disyllabic vocalic stem, except *\*e*-stems, whose initial syllable was long (*\*jalkaten* > *\*jalkatēn* > *\*jalka<sub>e</sub>n* > *\*jalka<sub>e</sub>* > *jalge* ‘feet (GPI)’). Probably the original stem vowel was syncope; it is not clear whether the syncope occurred

before or after the long vowel shortening in non-initial syllables. In East Estonian, the *e*-plural may have arisen on the basis of the genitive plural forms with two pluralizers, cf. *sarvega* 'with horns (ComPl)' where the plural stem *sarvẽ-* comes from GPI *\*sarveiten* > *\*sarvi̯en* > *\*sarvi̯en* > *\*sarvi̯ẽ* > *\*sarvẽ*, cf. 2.1.8 and 5.2.

#### 5.4. Other plural types

In Kodavere East Estonian and eastern Võru South Estonian one part of nominal *u-*, *ü-*, *o-*, and more rarely also *e*-stems, have a characteristic *a*-PLURAL, cf. e.g. GPI *näka*, IIIPl *näkka*, InePl *nakah*, ElaPl *näkast* of 'nägo 'face' and GPIIIPl *kukka*, InePl *kukah*, ElaPl *kukast* of 'kukk 'cone' in North Setu. The *a*-plural occurs also in Votic. There exist in North Estonian some adverbs and derivatives that are related to the *a*-plural, some of which are accepted also in Standard Estonian, cf. *püksata* 'without trousers', *rista misi* 'crosswise', *tükati* 'in parts; in places' Several attempts have been made to explain the rise of the *a*-plural. Probably the *a*-plural is a kind of stem plural that is not based on analogy but rather on iconic dissimilation.

In Tartu and Võru Estonian, also the so-called *si*-PLURAL is or has been used with two pluralizers in the nominative case, cf. Võru *-seq* ~ Tartu *-se* from *\*-se-t* or *\*-se-k*, and *-si* ~ *-še* ~ *-s* in other cases, cf. North Setu *setoq* 'Setus (NPl)', GPI *seto side*, PPI *setošet*, IIIPl *seto sihe* and *ilodoq* 'ugly (NPl)', GPI *ilo dostõ*, PPI *ilo doiše*. Full *si*-plural paradigms were presented only by Jakob Hurt (1886), who also explained that the pluralizers of this type go back to the derivational suffix of diminutives *-ne* : *-s(e)*-. A similar development of this suffix occurred in South-West Finnish.

Probably the first and second person plural pronouns in the nominative and the first and second person plural endings of verbs in the indicative and conditional moods *-me* and *-te* ended in the pluralizer *\*-k*. The reconstruction of the pluralizer *\*-k* is supported mainly by the corresponding Livonian pronouns *mēg* and *tēg*, and by the fact that the plural personal endings in Estonian must have been originally closed syllables.

#### 6. Case endings

The case system of Estonian has largely retained the characteristic features of Proto-Finnic. A brilliant detailed and critical survey of hitherto presented theories and hypotheses on the history of the Estonian case system and case formatives is found in Rätsep 1977 and 1979. Below the focus is more on changes than on the occurrence of case formatives.

## 6.1. Genitive

Estonian has preserved all the main functions of the genitive; genitive can be the case of the possessor and the total object. In addition, most postpositions and one part of prepositions ('läbi 'through', 'üle 'over') occur with a noun in the genitive. The genitive case has lost its former ending *\*-n* in the framework of the vocalization of the final *\*n*, similarly to the case formatives of the illative and the allative.

In the plural genitive in vocalic stems the regular development of the formative *\*-iēn* would have led in North Estonian to *\*māiēn* > † *mae* 'countries', *\*pūiēn* > † *puue* 'trees'; *\*jalkaiēn* > *jolge* 'feet', *\*kurkkuēn* > *kurkke* 'throats'; *\*heleiāiēn* > † *hele* 'bright', *\*kerkeiāiēn* > † *kerge* 'light; easy', *\*sampalaiēn* > *samble* 'mosses'. For consonantal stems the formative *\*-iēn* would have produced *\*meriēn* > † *merre* 'seas', *\*tuliēn* > † *tulle* 'fires'; *\*kēliēn* > † *keele* 'tongues', *\*sēniēn* > *seene* 'mushrooms'; *\*vartiēn* = *\*varitiēn* > † *varde*, *\*küntiēn* = *\*küntiēn* > † *küünde* 'nails'. Although forms of the type *jolge*, *kurkke* occur in the south-eastern part of the mainland and in Kihnu, in too many cases the regular development would have resulted in producing stem variants too different from other variants or forms with no attestable formative and often homonymic with other forms (cf. NSg *'hele*, NGSg *'kerge*, GSg *'keele*, GSg *'saare*). Probably at the same time in dialects serving as the basis of Standard Estonian, *\*-iēte(n)* was reinterpreted as a case ending and applied in addition to *varte*, *'küunte* also to cases like *seente*. Similarly, the sequence *-tte(n)* as in *\*neitsüitten* > *neitsite* 'virgins', (*\*kastekten* >) *\*kastetten* > *'kastete* 'dews' served as the prototype for *'hele date*, *'kergete*. The following regular types have been the prototypes for ascribing a transparent structure to other types, cf. (1) *\*kalaten* > *'kalade* 'fishes' for *maade*, *puude*, *jalgade*, *'kurkude*, *merede*, *'tulede* and (2) *\*tüitärten* > *'tütarde* 'daughters' for *sammalde*.

In dialects where the formative *\*-iēn* was used, vowel contractions resulted in vocalic plural genitive stems, which are in the weak grade for monosyllabic nominal stems (*pui* from *\*puiiēn* 'trees' in Vaivara Coast Estonian, and *puie* in East and South Estonian) and in the strong grade forms for gradational disyllabic stems (*jaluje* ~ *jaluje* ~ *jalu* from *\*jalkoiēn* 'feet (GPI)', *kaluje* ~ *kaluje* ~ *Vaivara kalo* from *\*kaloīēn* 'some fish (GPI)' in Coastal Estonian and *jalu* ~ *jalgo* 'feet (GPI)', and *'kallo* ~ *'kallu* 'some fish (GPI)' in South Estonian). Similarly, in western Estonia, which according to Paul Alvre (cf. 2.1.8) should belong to the *\*jalkaδen*-area, such plural genitive forms as *lambu* and *'lambi* 'sheep' come rather from (*\*lampahaiten* >) *\*lampahoiēn* and *\*lampahiēn* than from *\*lampahaiēn*. The latest phenomenon in the development of genitive plural forms of the type is contamination

with the North Estonian pluralizer *-de* in Coastal and North-East Estonian, cf. *puide*, *jalgude*, *kalude* or with *-de* or *-te* in East Estonian, cf. *puide ~ puite*.

## 6.2. Partitive

The variety of partitive endings in modern Estonian results from the history of the former ending *\*-tA* and, in the plural of the formative *\*-itA*, where *\*-i-* is the pluralizer and *\*-tA* is the partitive ending.

When ignoring the loss of vowel harmony, the partitive ending is retained after a short monophthong of a primarily stressed syllable (*\*setä > seda* 'this'). Elsewhere its vowel was apocopated in a post-tonic syllable (*\*sūta > suud* 'mouth', *\*täitā > täitā* 'louse', *\*mertā > merd* 'sea'). The stop *\*t* was subjected to suffixal gradation, i.e. it became weakened and lost, if intervocalic and preceded by an unstressed syllable, in Coastal and North-East Estonian also after a secondarily stressed syllable (*\*matalata > \*matalaia > madala* 'low'). After the loss of the weakened stop the vowels of two syllables contacted to form along monophthong that later was shortened or the suffixal vowel *\*a* or *\*ä* was apocopated (*\*kalata > \*kalaia > kala* 'fish', *\*jalkata > \*jalkaia > jalga* 'foot', *\*kurkkuta > kurkkua > kurku* 'throat'). The stop *\*t* was retained after a stressed syllable and if following a consonant of an unstressed syllable (*\*sūta > suud* 'mouth', *\*mertā > merd* 'sea'; cf. also Coastal Estonian *\*kēltā > kield* 'tongue', *\*tütärtā > tüdard* 'daughter'; Hiiumaa *keeld*, *tütard*, *madalad*; Võru *tütärd*, *süänd* 'heart').

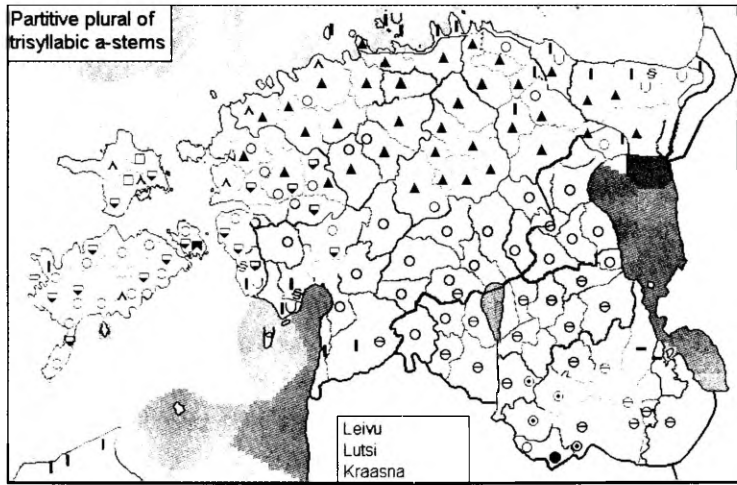
In a primarily stressed syllable after a long monophthong, diphthong, or a resonant preceded by a short monophthong, the stop is retained as somewhat weakened (*\*sūta > suud* 'mouth', *\*täitā > täitā* 'louse', *\*mertā > merd* 'sea', *\*mēstā > meest* 'man', *\*naista > naist* 'woman', *\*kirvestā > kirvest* 'axe', *\*kahta > kaht* 'two'). For the stem-final *\*t*, the two identical stops gave rise to a long stop (*\*kättā > kätt* 'hand', *\*künttä > küünt* 'nail'). In forms like *küünt* the final stop was analysed as a case ending. The long *-t* was introduced even after the stem-final resonant, preceded by a long monophthong (*keelt* 'tongue', *südant* 'heart'). If preceded by a stem-final *\*k*, the suffixal *\*t* assimilated the *\*k* (*\*kastekta > kastetta* 'dew') everywhere in Finnic, maybe except Livonian (cf. Livonian PSg *kastūgt* from NSg *kastūg* 'dew'). After the loss of the stem-final *\*k* in the nominative singular and the loss of the weakened stop in weak-grade forms (*\*k > \*k̃ > Ø*, cf. GSG *\*kasteken > kaste*), the long *-t* from *\*-kt-* (cf. *\*kastekta > kastetta > kaštetta > kastet*) was re-analysed as a case ending. The new ending was substituted for the postvocalic partitive ending *-d* after the vowel of a non-initial syllable

in most of South Estonian and locally in North Estonian. Moreover, it is accepted as the norm in Standard Estonian, cf. *kerget* 'light; easy', *madalat* 'low, shallow' instead of *\*kerkeĩtã* > *kerged*, *\*matalata* > *madalad*.

The former complex partitive plural formative *\*-itA* followed a stressed syllable, *\*-iĩA* an unstressed syllable. The regular reflex *-id* of *\*-itA* was preserved after syllables with the main stress, except after *\*i* and *\*ũ* (*\*maita* > *maid* 'countries', *\*teitã* > *teid* 'you (Pl); roads'). After syllables with a secondary stress, it is supposed that the pluralizer *\*i* was retained from the contraction and fusion of the stem vowel and the pluralizer, cf. Table 21.

**Table 21.** The traditional scheme of the regular development of the PPl forms of *\*jumala* 'god', *\*kũmmen* 'ten' and *\*terveh* 'healthy' in North Estonian

UNDERLYING FORM	<i>*jumalaita</i>	<i>*kũmmeneitã</i>	<i>*terveheitã</i>
Contraction and fusion	<i>*jumalita</i>	<i>*kũmmenitã</i>	<i>*tervehitã</i>
Loss of intervocalic <i>*h</i>			<i>*terveitã</i>
Vowel contraction			<i>*terveitã</i>
Syncope		<i>*kũmmnitã</i>	
Apocope	<i>jumalit</i>	<i>kũmnit</i>	<i>terveit</i>
ORTHOGRAPHIC FORM	<i>jumalid</i>	<i>kũmnid</i>	<i>terveid</i>



**Figure 20.** Partitive plural endings of trisyllabic *a*-stems (e.g. *jumal* 'god') in Estonian dialects after Andrus Saareste (1955a, Map 91), modified

Key: ▲ *-aid*, ▲ *-ad*, ● *-eid*, ⊙ *-iid*, ○ *-id*, ⊖ *-it*, ⊕ *-ed*, — *-et*, | *-i*, ♥ *-uid*, ♡ *-ud*, U *-u*, ■ *-mi*, § *-si*.

Such forms as *'jumalid* and *'jumalit* occur mainly to the south of Harjumaa, Järvamaa, and Virumaa, cf. Figure 20; the PSg forms of the same type occur also in Votic, Ingrian, Finnish, Karelian, and Veps. Still the North Estonian forms with a diphthong in the former secondary-stressed syllable and the western North Estonian *ud*-partitives and *u*-genitives of *a*-stems, such as *ambud* ~ *ammud* 'teeth', *'madalud* 'low ones' may represent a specific way of development where diphthongs in secondary-stressed syllables were long retained, cf. Table 22.

In the complex formative *\*-iŕA* the pluralizer *\*i* and the preceding stem vowel underwent the changes presented, which led to the formation of the stem plural, cf. Table 22. In addition, the weakened consonant *\*ŕ* was lost, and the final vowel was apocopated.

**Table 22.** An alternative scheme of the regular development of the PPI forms of *\*jumala* 'god', *\*kümnen* 'ten' and *\*terveh* 'healthy' in North Estonian

UNDERLYING FORM	<i>*jumalaita</i>	<i>*kümneitā</i>	<i>*terveheitā</i>
Loss of intervocalic <i>*h</i>			<i>*terveitā</i>
Syncope		<i>*kümneitā</i>	<i>*terveitā</i>
Apocope	<i>jumalait</i>	<i>kümneit</i>	<i>terveit</i>
ORTHOGRAPHIC FORM	<i>'jumalaid</i>	<i>'kümneid</i>	<i>'terveid</i>

In order to avoid opacity of stem plural partitive forms, in most Estonian dialects, the majority of stem plural forms were replaced by forms consisting of the vocalic stem and a new case formative *-si* or *-sid*. The plural partitive formative *-si* appeared in literary Estonian in the 17<sup>th</sup> century and was replaced by the formative *-sid* in the second half of the 19<sup>th</sup> century. According to the theory first formulated for South-West Finnish by August Ahlqvist (1877–88) and applied to South Estonian by Jakob Hurt (1886), *-si* contains *-s-*, which was extracted from the plural forms of words with the derivational suffix *-ne* : *-s(e)-*, cf. also Kettunen 1960: 118, Alvre 1966: 162–163, Rätsep 1979: 20–22. As applied to Standard Estonian, this explanation claims that the ending *-si*, abstracted from the second or fourth syllable, cf. *naisi* < *\*naisi<sub>1</sub>a* < *\*naisi<sub>1</sub>ta* < *naisita* 'women (PPI)', *sugu'lasi* < *\*sukulaisi<sub>1</sub>a* < *\*sukulaisi<sub>1</sub>ta* < *\*sukulaisita* 'relatives (PPI)', was applied to the third syllable. As to the ending *-sid*, this explanation meets a paradox: *-sid* is claimed to be abstracted from such plural partitive forms as *rebasid* (< *\*repäsitā*) or *'hobusid* of *'rebane* 'fox' : GSg *rebase* and *'hobune* : GSg *'hobuse* 'horse' while the actual plural partitive forms of such nominals are *rebaseid* and

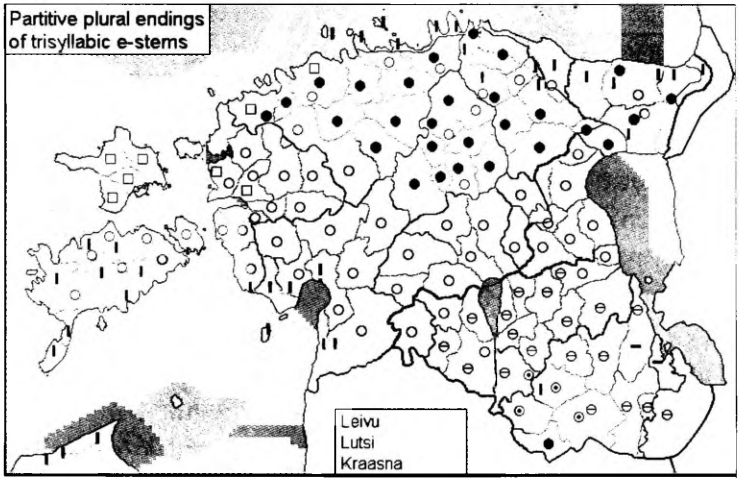
*'hobuseid*, cf. Figure 21. Hence the formative *-sid* in the Standard Estonian must be treated first of all as a loan suffix.

### 6.3. Local cases

Case formatives of interior and exterior local cases have consisted of two elements; their final elements go back to case endings *\*-n* (from the Pre-Finnic *\*-ń*) of the former lative, *\*-nA* (where *A* = {*a*, *ä*} is identical to the essive ending), and *\*-tA* to the partitive ending (its former separative meaning is sometimes still present in Estonian, e.g. *tükk leiba* 'a piece of bread' is in fact equivalent to *tükk leivast* 'a piece from bread').

		Directional <i>*-n</i>	Static <i>*-nA</i>	Separative <i>*-tA</i>
Interior <i>*-s-</i>	Illative	<i>*-sen</i> (> <i>*-hen</i> )	Inessive <i>*-snA</i>	Elative <i>*-stA</i>
Exterior <i>*-l-</i>	Allative	<i>*-len</i>	Adessive <i>*-lnA</i>	Ablative <i>*-ltA</i>

The development of the inessive formative took two directions, present also in Estonian.



**Figure 21.** Partitive plural endings of trisyllabic *e*-stems (e.g. *'hobune* 'horse', *sinine* 'blue') in Estonian dialects after Andrus Saareste (1955a, Map 92), modified

**Key:** ● *-eid*, ○ *-iid*, ○ *-id*, ⊖ *-it*, ⊕ *-ed*, ⊗ *-et*, | *-i*.

In most dialects the inessive ending *\*-snA* developed into *\*-ssA*, similarly to *\*-lnA* > *\*-llA* in the adessive. In South Estonian and in Etelä-Pohjanmaa Finnish the development was *\*-snA* > *\*-hnA*: the ending *-hn* is still retained in Hargla and its immediate neighbourhood in the Võru area (*'mõtsahn* 'in the forest'). In the eastern Võru *-hn* is simplified to *-h* (*'mõtsah*). In Mulgi, Tartu, western Võru, and also in Kodavere East Estonian, *-hn* is simplified to *-n* (*'mõtsan*).

What is problematic in connection with directional cases is the initial geminate at the beginning of modern formatives of the allative (*'mulle* 'to me', *sulle* 'to you (Sg)', *talle* 'to him'), which is best retained in Votic, Ingrian, and Finnish. It may have arisen due to the influence of the adessive formative after the change *\*ln* > *\*ll* in Proto-Finnic (Rätsep 1979: 53).

### 6.3.1. Illative

In the framework of the spirantization of the intervocalic *\*s* after the vowel of non-initial syllables, the illative ending *\*-sen* changed into *\*-hen* in most nominal types. Somewhat paradoxically, *\*-sen* > *\*-hen* occurred also after the long monophthong or diphthong of the initial syllable (cf. modern Estonian *maha* 'into the land; down', *pähe* 'into one's head', *suhu* 'into one's mouth'). Thus such illative forms of the present monosyllabic stems point to the retention of the original disyllabicity of the corresponding stems at the time of the rise of the illative ending *\*-hen* (e.g. *\*mayehen*, *\*pänehen*, *\*suwehen* (or *\*śuwehen*)). In most Finnic dialects, *\*s* in the illative ending *\*-sen* has remained a sibilant at the beginning of the 3<sup>rd</sup> or 4<sup>th</sup> syllable if preceded by (a) an intervocalic *\*h* (no matter whether from *\*s* or *\*š*), (b) in Estonian, Lower Luga and Soikkola Ingrian and in one part of Finnish dialects also by *\*ĩ* and *\*ķ* (which had been weakened in the framework of the suffixal gradation, cf. 3.3.2). The ending *\*-sen* is best represented by *-zē* in Veps. The Etelä-Pohjanmaa illative formative *-sehen* and *-seen* in other Finnish dialects, *-see* ~ *-sõõ* in Votic, *-sse* in Lower Luga, Soikkola, and Upper Luga Ingrian must be explained on the model of Etelä-Pohjanmaa as originally containing two illative endings, as attested already by Eemil Nestor Setälä (1896: 246–248; cf. also Kettunen 1962: 92–93). The geminate *ss* in the Estonian and Ingrian illative formatives obviously results from gemination of single consonants after (secondarily) stressed syllables, cf. 3.5.3 A.

Actually, the conditions of retention of *\*s* in the illative endings in Finnic dialects are somewhat contradictory, except in Veps and Upper Luga Ingrian, where the endings beginning in *\*s* occur only after *\*h* (cf. Veps *veñehezē* 'into the boat'). The alternation *\*s* : *\*h* occurs in all Finnic dialects and may

well reflect an alternation of *\*s* that had occurred already in the Indo-European source languages of the oldest borrowings of the type in Finnic (Viitso 1996b: 320–321). Hence, all cases of *\*-sen* after the consonant *\*h* are old, no matter whether *\*h* comes from *\*š* or *\*s*. On the other hand, suffixal gradation that led to the weakening of *\*t* and *\*k* into *\*ĩ* and *\*ķ* and often to the subsequent loss of the weakened stops in Estonian, Lower Luga and Soikkola Ingrian, and in one part of Finnish dialects has either blocked the change of *\*s* to *\*h* in the illative formatives at least of the *\*t*- and *\*k*- nouns and adjectives and/or attracted the formative *\*-sehen* to replace the former formative (cf. the illative forms *\*oluĩesehen* and *\*lähteķesehen* of *\*olut* ‘beer’ and *\*lähtek* (< *\*läktek*) ‘source, water spring’).

Except in Ingrian, Kymenlaakso Finnish, Karelian, Lude, and Veps the intervocalic *\*h* was lost after non-initial syllables that led to contraction of the stem-final and suffixal syllables. The resulting long vowels in non-initial syllables triggered the gemination of the preceding intervocalic single consonants in different Estonian dialects (*\*merehen* ‘into the sea’ > *\*merēn* > *\*merrēn* > *merre*, *\*tupahen* ‘into the room’ > *\*tupahan* > *\*tupān* > *\*tuppān* > *tuppa*). As the normal development of the illative forms led to the loss of *\*h* and the subsequent contraction of the stem-final and suffix syllable and to the loss of the final *\*n* in the illative ending (*\*mettsāhen* ‘into the forest’ > *\*mettsāhän* > *\*mettsān* > *metsa*), that is, to secondarily unmarked illative forms, in North Estonian the ending *-sse* was generalized to the majority of illative forms except those occurring with verbs that require an adverbial directional function.

In Modern Estonian, a group of monosyllabic consonantal stems of words having otherwise a disyllabic *e*-stem with a long vowel followed by an intervocalic resonant *m*, *n*, *l*, or *r*, add mostly the ending *-de* in the illative singular (*keelde* from *keel* ‘tongue’, *joonde* from *joon* ‘line’, *juurde* from *juur* ‘root’). Earlier this type of illative was general in South Estonian and in most of East Estonian, and, only scattered, mainly in south-western Virumaa and north-eastern Järvamaa, instead or beside the corresponding regular forms (*\*kēlehen* > *\*kēlēn* > *keele*, *\*jūrehen* > *\*jūrēn* > *juure*). The *de*-illative has been explained by analogy with such illative forms as *‘küünde* from *‘küüs* ‘nail; claw’ and *‘kaande* from *‘kaas* ‘cover; lid’, where *d* originally belonged to the stem (Kettunen 1962: 35–36, Saareste 1955b: 30–31), e.g. *\*kūntehen* > *\*kūntēn* > *küünde*. The ending *-de* had a broader range for monosyllabic consonantal stems of nouns with a short vowel followed by *m*, *n*, *l*, or *r* (*‘merde* from *meri* ‘sea’, *tulde* from *tuli* ‘fire’, *lunde* from *‘lumi* ‘snow’, *unde* from *uni* ‘sleep’). Moreover, this type of illative was earlier general in western Virumaa and some parts of Järvamaa being by now replaced by standard forms with geminated intervocalic resonants, cf. *merre*. Contrary to

Kettunen and Saareste who treated this type together with *de*-illative forms such as *'keelde*, it must be considered improbable that the proposed source of analogy, e.g. *'küüs*, GSg *'küüne*, PSg *küünt*, IISg *küünde*, could more effectively influence such words as *'uni*, GSg *'une*, PSg *und*, IISg *une* than such words as *'joon*, GSg *'joone*, PSg *joont*, IISg *joone*. This explanation is even less convincing for South Estonian where the source type is presented by the single word *'laan* 'wood', GSg *'laanõ*, PSg *'laant*, IISg *'laandõ*, which may be a borrowing from North or East Estonian as other words of the historical type have undergone paradigmatic levelling of another types, cf. Võru *'küüds* 'nail; claw', GSg *'küüdse*, PSg *'küüst*, IISg *'küüste* and *'kaas* 'cover; lid', GSg *'kaasõ*, PSg *'kaast*, IISg *'kaastõ*. Because of that it is likely that the *de*-illative may have arisen by analogy with such words as *'vars* 'stalk, stem', GSg *'varre*, PSg *'vart*, IISg *'varde*. This would best explain even such South Estonian illative forms as *'tõistõ* from *'tõõnõ* ~ *'tynõ* 'second; other, another', GSg *'tõisõ*, PSg *tõist*, and Tartu *'keri'kude* from *'kerik* 'church', GSg *'kerigu*, PSg *'kerigut*. Then the rise of the *de*-illative probably occurred before the rise of the analogical partitive singular ending *-t*, cf. 6.2.

#### 6.4. Translative, terminative, essive, and excessive

The three nominal cases translative, terminative, and essive, and the adverbial case excessive (*'kodunt* 'from home', *'tagant* 'from behind') are similar to the local cases. The translative and the essive refer rather to situations than to place and time; on the other hand, the terminative, essive, and excessive all begin in a more or less obscure *\*n*:

	Directional	Static <i>*-nA</i>	Separative <i>*-tA</i>
	Translative <i>*-ksi</i>		
<i>*n-</i>	Terminative <i>*-nnik</i>	Essive <i>*-nnA</i>	Excessive <i>*-ntA</i>

The translative in Estonian *-ks* goes back to *\*-ksi* whose reflexes are present in all the Finnic dialects and in Mordvinic. In South Estonian, in the southernmost West Estonian dialects, Kodavere East Estonian, and in Votic the cluster *\*ks* was simplified to *\*ss*. In Mulgi South Estonian and in Pärnumaa North Estonian the ending often has the final vowel *-e* (*'vanasse* 'old', *'pike'masse* 'longer'; Rätsep 1979: 68). It is unclear whether this vowel is an innovation or connected with *e* in the Finnish translative endings when used with possessive suffixes (cf. Finnish *nähdäkseni* 'insofar I see'). In dialects of eastern Estonia beginning from Haljala Coastal Estonia and ending with the Võru South Estonian enclaves in Latvia, the regular reflexes of the translative end-

ing have been partially or totally replaced by the ending *-st*, identical to the relative ending. Despite several attempts, no good explanation has been found for this development or substitution.

In the framework of Finnic, only Estonian has the terminative case ending in *-ni*, probably from *\*-nnik*, where the initial *\*nn* may contain the genitive ending *\*-n*, as postpositions in Finnic follow a noun in the genitive. Similar suffixes, however, have been found in adverbs and postpositions of Livonian and Veps.

### 6.5. Abessive and comitative

The abessive case of nominals exists in most Finnic dialects, but is absent in Livonian and, differently from the situation in Finnish dialects, in Standard Finnish. Anyway the abessive case occurs everywhere in Finnic with supines in *\*-ma-*. In most Estonian dialects the abessive ending *\*-ttAk ~ \*-ĩtAk* retained its geminate and vowel. Locally in Hiiumaa and after the secondarily stressed syllable in South Estonian, the geminate was de-geminated; in Mulgi South Estonian and its neighbourhood the vowel was replaced by *e* in the former third syllable and farther in the word. In Võru South Estonian the earlier *\*-k* is represented by the laryngeal stop. In south-eastern Võru (Hargla, Rõuge, Vastseliina, Rāpina, Setu) the abessive ending was replaced by the ending *-ldaq*, in Vastseliina also by *-llaq*, in the Lutsi enclave in Latvia by *-ldaq* or, more often by *-ndaq*.

The comitative ending *-ga* developed from the postposition *kaas* into a case ending after the first half of the 17<sup>th</sup> century, in South Estonian somewhat earlier than in North Estonia, except that in South Estonian the corresponding postposition was obviously *kaan*. Both the North and South Estonian postpositions go back to the stem *\*kansa* (< Germanic *\*χansō*), which served as the basis for similar postpositions in Finnish. The postposition developed into the comitative ending also in Votic, Lower Luga Ingrian, and scattered in the eastern Finnish dialects.

## 7. Pronouns

The Estonian personal pronouns have long and short forms whose usage depends on the stressed vs. unstressed position in the sentence. Historically, the Estonian short singular pronouns and the short third person plural pronoun are secondary allegro forms shortened from the corresponding longer stems. A similar shortening of singular pronouns occurred in Livonian only

in the nominative case. In Saaremaa and in western mainland North Estonian the short pronouns replaced the long forms and are of Q3 in the stressed position, cf. Saareste 1955a, Map 73. In eastern and northern Vaivara the first and second person singular pronouns lost the internal consonant *n* (*miä* ~ *mie* 'I', GSG *miu* ~ *mivu*). This loss is related to a similar loss in Ingrian, Votic and south-eastern Finnish dialects. Independently, a similar loss is characteristic of Mulgi and some parts of north-western Tartu South Estonian, northern Viljandimaa North Estonian (*mia* 'I'). A similar facultative loss occurred also in some places in Järvamaa, Virumaa, and northern Tartumaa. North Estonian, as well as Livonian and Veps, have consonantal stems in the partitive forms of the first and second person singular pronouns, cf. *mind* < *\*minta* 'me', *sind* < *\*sinta* 'you (Sg)' Coastal, North-East, East and South Estonian, as well as Votic, Ingrian, Finnish, and Karelian, have replaced the consonantal stem by the genitive stem. In the plural the long first and second person pronouns *meie* 'we' and *teie* 'you' (in Coastal and North-East Estonian *mei*, *tei*) are former genitive forms of *me* and *te*. East Vaivara shares its first and second person plural nominative pronouns *müö* (< *\*mõ*) and *tüö* (< *\*tõ*) with Votic, Ingrian, East Finnish, Karelian, Lude, and Veps. Estonian shares the singular and plural third person pronouns *tema* and *nemad* with Votic and Livonian; in other Finnic languages these words are still demonstrative pronouns with the meaning 'this here' The *i*-plural forms of *nemad* come from the paradigm of the demonstrative pronoun 'need' 'these' In Estonian, Votic, and Livonian the former third person pronoun *\*hene-* replaced the former reflexive pronoun *\*i(t)se* in all cases except the nominative, cf. Estonian *ise*.

Estonian uses three different systems of demonstrative pronouns. In North, Coastal, and North-East Estonian there is only one neutral demonstrative pronoun *see* ~ *sie*; in addition, in the contact zone of Coastal, North and North-East Estonian a somewhat pejorative non-attributive pronoun *tuo* was sometimes used. In Mulgi and Tartu South Estonian there are two neutral demonstrative pronouns *see* 'this' and *too* 'that' Võru South Estonian has three demonstrative pronouns *seo* ~ *sjoo* 'this', *taa* 'that close to the speaker or addressee' and *tuu* 'that far from both the speaker and the addressee' are used. Standard Estonian accepts both *see* (< *\*se*) and *too* (< *\*tõ*), whose declension has been modified on the example of *see* (PSG *seda* and *toda*).

The interrogative and relative pronouns *kes* 'who' and *mis* 'what' end, similarly to Livonian, in *-s* only in the nominative case. *-s* obviously comes from the postposed demonstrative pronoun *\*se* that has lost its vowel because of apocope. In colloquial Estonian the demonstrative pronoun is added once more, cf. *'kesse*, rarely also *'misse*.

## 8. Verbs

### 8.1. Non-finite verb forms

Similarly to other Finnic languages, non-finite verb forms of Estonian include the infinitive, gerund, supine, and participles.

**Table 23.** The underlying forms of non-finite verb formatives after the single and geminate stop weakening

NON-FINITE FORMS	PERSONAL	IMPERSONAL
Participles		
Present	<i>*pA *p̃A</i>	<i>*tAṗA *ṭApA *ttAṗA *ttApA</i>
Past	<i>*nUt</i>	<i>*tU *ttU</i>
Supine		
Illative	<i>*mAn</i>	?
Inessive	<i>*mAhen</i>	—
Elative	<i>*mAsnA</i>	—
Translative	<i>*mAstA</i>	—
Abessive	<i>*mAksi</i>	
	<i>*mAṭtak *mAttAk</i>	
Infinitive	<i>*ṭAk *tAk</i>	
Gerund	<i>*ṭesnA *tesnA</i>	

#### 8.1.1. Infinitive and gerund

In Proto-Finnic both the infinitive formative *\*-tAk* and the gerund formative *\*-tesnA* were similar by beginning in the stop *\*t* that was probably of the same origin and occurred at the beginning of a closed syllable. The final element *\*-k* of *\*-tAk* was probably the former lative case ending, and *\*-snA* of *\*-tesnA* was the inessive ending. Except after *\*s*, the stop *\*t* was weakened to *\*ṭ* at the beginning of the second and fourth syllable in the framework of radical gradation. Later *\*ṭ* was assimilated to the preceding *\*n*, *\*l*, *\*r* (*\*panṭak* > *panna* ‘to put’, *\*panṭesna* > *pannes* ‘putting’; *\*tulṭak* > *tulla* ‘to come’, *\*tulṭesna* > *tulles* ‘coming’) and lost elsewhere (*\*tehṭäk* > *teha* ‘to do’, *\*tehṭesnä* > *tehes* ‘doing’; *\*viṭäk* > *viia* ‘bring away’, *\*viṭesnä* > *viies*, in Standard Estonian *panna*, *pannes*; *tulla*, *tulles*; *teha*, *tehes*; *viia*, *viies*). It is not clear whether *\*ṭ* was lost in the infinitive formant of northernmost North Estonian after *\*ā* and *\*ā̃* or the infinitive formative was restored (*saada* ‘to get’, *jääda* ‘to stay; remain’). The gerund forms *saades* ‘getting’ and

*jäädes* 'staying' may well have preserved the stop. At the beginning of the third syllable *\*t* was weakened to *\*ĩ* due to suffixal gradation (*\*antaĩak* > *\*antā* > *anda* 'to give', *\*tappaĩak* > *\*tappā* > *tappa* 'to kill'), except where the initial syllable was short (*\*jakatak* > *jagada* 'to divide'), cf. 3.3.2.

The underlying form of the gerund formative in Proto-Finnic is somewhat problematic. In the formative *\*-tesnA*, the stop *\*-t-* is probably identical to the corresponding element in the infinitive formative, and the final part *\*-snA* is the inessive case ending; the origin and role of the element *\*e* is problematic. The development of *\*t* in the formative was similar to that in the formative of the infinitive (cf. *\*tehñesnā* > *tehes* 'doing', *\*jakatesna* > *jagades* 'dividing', *\*antañesna* > *andes* 'giving', *\*tappañesna* > *tappes* 'killing'). Similarly to infinitives, most gerunds of monosyllabic stems are of Q3 instead of expected Q2 (cf. *viies* from *\*vĩñesnā* 'bringing away', *pannes* 'giving' from *\*panñesna*, and *tulles* 'coming' from *\*tulñesna*).

The modern infinitive and gerund formatives *-ta* and *-tes* of so-called contracted verbs such as *hüpata* 'to jump' and *hüpates* 'jumping' come from the sequence of the original stem-final *\*t* and the suffix-initial *\*t*: *\*hüppät-täk*, *\*hüppät-tesnā*, cf. Pr1Sg *hüppan* < *\*hüppäĩän*. In contracted verbs with a disyllabic consonantal stem and a short initial syllable, these formatives were replaced by *-da* and *-des* on the model of forms such as *jagada* and *jagades* in most Estonian dialects, cf. *magada* 'to sleep' and *magades* 'sleeping' instead of †*ma(g)ata* < *\*makattak* and †*ma(g)ates* < *\*makattesna*.

In Võru South Estonian the infinitive and gerund of contracted verbs show an interesting difference in the development of the former heteromorphemic sequence *\*tt*, e.g. *hüpädäq*, *hüpäteh* and *maadaq*, *maatõh*. Probably the former formant *\*-ttAq* was replaced by analogy with infinitives of originally trisyllabic stems such as *kaotadaq* 'to lose' < *\*kaĩottatak*. The weakened *\*ĩ* in infinitive and gerund formatives is lost (*tullaq*, *tullõh*; *viiaq*, *viieh*; *saiaq*, *saiõh*; *jakaq*, *jakõh*; *andaq*, *andõh*; *tappaq*, *tappõh*).

### 8.1.2. Supine

In Finnic, supine formatives consist of the supine marker *\*-mA-*, which is a former action noun suffix, and a case ending. In Estonian, the inventory of possible supine cases is restricted to the illative, inessive, elative, translative, and abessive. Differently from other Finnic languages, Estonian has also an impersonal supine illative form, viz. the impersonal supine illative that is used either with the third person singular form of the indicative or the conditional mood of the verb 'must', cf. *seda peab söödama* 'one must eat it' or *seda peaks söödama* 'one should eat it'

### 8.1.3. Participles

The earlier formatives of the present and past participles of the personal and impersonal voice were as follows:

	Present		Past	
	Singular	Plural	Singular	Plural
Personal	*-pA	*-pAt	*-nUt	*-nUtet
Impersonal	*-tApA ~ *-ttApA	*-tApAt ~ *-ttApAt	*-tU ~ *-ttU	

The impersonal suffixes with a single *\*t* occurred after an initial syllable, and those with the geminate *\*tt* occurred after a non-initial syllable. This contrast occurs in modern Estonian in the form of the contrast *d : t* (*söödav* ‘edible’, *söödud* ‘eaten’ vs. *soovitav* ‘recommended’, *soovitud* ‘desired, requested’), except after obstruents where there is always a fortis *t* (*nähtav* ‘visible’, *nähtud* ‘seen’). Although the single *\*t* obviously underwent the suffixal gradation, the stop was retained to preserve the very important morpheme from the subsequent loss. The stop *\*p* in present participles underwent radical gradation after a stressed syllable at the beginning of a closed syllable and suffixal gradation after an unstressed syllable – the weakened *\*p̃* merged into *v*. As the present personal participle was also the source of the third person endings, in the singular the endings with the initial *v* became the present participle markers, and the endings with the initial *\*p > b* became the third person singular endings.

Present participles are inflected for case and number when occurring as attributes (*‘põlevas majas* ‘in the burning house (IneSg)’, *põle vates majades* ‘in burning houses (InePl)’, *‘hülja tavast majast* ‘from the house being abandoned (ElaSg)’, *‘hülja tavatest majadest* ‘from the houses being abandoned (ElaPl)’).

Past participles together with personal and impersonal finite forms of the verb *olema* ‘to be’ constitute the so-called compound tenses.

Past participles as preposed attributes are not inflected (*‘põlenud majas* ‘in the burnt (iv) house’, *põlenud majades* ‘in the burnt (iv) houses’, *‘hüljatud majast* ‘from the abandoned (tv) house’, *‘hüljatud majadest* ‘from the abandoned (tv) houses’). In view of that deficiency of preposed past participles there exists a problem whether such (inessive) forms as *põle nutes* and *‘hülja tutes* as in *neis majades, põle nutes ja ‘hülja tutes, elasid vaid mõned kassid* ‘in these burnt and abandoned houses lived only some cats’ represent case forms of postposed attributive past participles or the agent and patient nouns ending in *-nu* and *-tu* or *-du*. Modern grammars prefer the first solution.

It is possible but not proved that the past personal participle *-nud* < *\*-nUt* received its final *\*-t* from *\*-Ut*-diminutives. In most dialects the participle has no special plural forms any more. In any rate the past impersonal participle in North Estonian and Livonian received its final stop on the example of the personal participle. In Estonian dialects and in colloquial Estonian the *nud*-participles vary to a great extent. In Estonian nouns ending in *-nu* and *-tu* or *-du* have been formed on the basis of past participles (*'kadunud* 'laps' 'the lost child' → *'kadunu* 'the lost one', *kaotatud* 'raamat' 'the book lost' → *'kaotatu* 'one being lost'); these nouns are inflected for all cases in singular and plural.

## 8.2. Finite verb forms

Except in Livonian, in all Finnic languages finite verb forms are either personal or impersonal. Personal forms end in a personal ending or, in principle, presuppose in the corresponding phrase a pronoun or noun that functions as the subject.

**Table 24.** The underlying forms of finite verb formatives after the single and geminate stop weakening

FINITE FORMS	PERSONAL				IMPERSONAL	
	Affirmative			Negative	Affirmative	Negative
	The 1 <sup>st</sup> p.	The 2 <sup>nd</sup> p.	The 3 <sup>rd</sup> p.			
INDICATIVE						
Present Singular	<i>n</i>	<i>t</i>	<i>pi pi</i>	<i>k</i>	<i>tAksen</i> <i>ĩAksen</i>	<i>tAkA</i> <i>tAkA</i>
Plural	<i>mmek</i>	<i>ttek ĩtek</i>	<i>piAt</i>		<i>ttaksen</i> <i>ĩtAksen</i>	<i>ttAkA</i>
Past Singular	<i>in</i>	<i>it</i>	<i>i</i>	<i>nUt</i>	<i>tihen ttihen</i>	<i>tU ttU</i>
Plural	<i>immek</i>	<i>ittek</i> <i>ĩitek</i>	<i>it</i>			
CONDITIONAL						
Present Singular	<i>ksin</i>	<i>ksit</i>	<i>ksi</i>	<i>ksi</i>	<i>tAksihen</i> <i>ĩAksihen</i>	<i>ĩAksi</i> <i>tAksi</i>
Plural	<i>ksimmek</i>	<i>ksittek</i> <i>ksiitek</i>	<i>ksit</i>	<i>ksi</i>	<i>ttAksihen</i> <i>ĩtAksihen</i>	<i>ĩtAksi</i> <i>ttaksi</i>
IMPERATIVE						
Singular	—	<i>k</i>	<i>kohen</i> <i>ķohen</i>		<i>tAkohen</i> <i>tAkohen</i>	
Plural	<i>kem ķem</i>	<i>ket ķet</i>	<i>kohet</i> <i>ķohet</i>		<i>ttAkohen</i> <i>ttAkohen</i>	

### 8.2.1. Voice

The morphological distinction between the personal and impersonal voice is shared by all Finnic languages, except Livonian where it degenerated into the distinction between the active and passive voice expressed by different participles. The personal voice has no general characteristic marker, and yet the finite forms of several moods have personal endings, cf. 8.2, and the past indefinite participle has a formative with a special component.

#### 8.2.1.1. Impersonal forms

All Finnic dialects, except Livonian have two series of the impersonal voice markers, one beginning in the single stop *\*t* after a monosyllabic stem or a consonantal stem, another beginning in the geminate *\*tt* after a polysyllabic vocalic stem. The single stop weakened to *\*ĩ* in a closed syllable preceded by a primarily stressed syllable (*\*vītaksen* > *\*vĩťaksen* > *viiakse* ‘someone takes away’, *\*pantaksen* > *\*panťaksen* > *pannakse* ‘someone puts’), the geminate stop weakened in a closed syllable if preceded by a secondarily stressed syllable (*\*oppettattaksen* > *\*eppetteťtaksen* > *õpe’tatakse* ‘someone teaches’). The single or geminate stop followed by *\*A* (i.e., depending on vowel harmony, by *\*a* or *\*ä*) in present indicative, in the conditional and imperative mood and supine forms, by *\*i* in past indicative forms, and by *\*U* (i.e. by *\*u* or *\*ü*) in the past participle forms, cf. Tables 23 and 24. There are no traces of sequences (diphthongs) †*Ai* and †*Au*.

The series of markers beginning in the geminate *\*tt* rose as a result of reanalysis of impersonal forms of verbs with a consonantal stem ending in *\*t*, for example *\*makattaksen* > *maga’takse* ‘someone sleeps’, *\*makattihen* > *magati* ‘someone slept’ and *\*hüppättaksen* > *hüpa’takse* ‘someone jumps’, *\*hüppättihen* > *hüpati* ‘someone jumped’. In order to prevent the loss of transparency of impersonal forms in the course of loss of weakened *\*t* in forms such as *\*jakaťaksen* ‘someone divides’, *\*jakaťihen* ‘someone divided’ and *\*paraneťakse* ‘someone recovers (iv)’, the markers beginning in a single intervocalic *\*ĩ* or *\*t* (*\*paranetihen* ‘someone recovered’) after the vowel of a non-initial syllable were replaced by markers beginning in the geminate *\*tt* (*\*jakattaksen* > *jaga’takse*, *\*jakattihen* > *jagati*; *\*paraneťtaksen* > *para’netakse*, *\*paranettihen* > *para’neti*).

## 8.2.1.2. Personal forms

Formatives of the first and second person go back to the corresponding personal pronouns that began in *\*m* and *\*t*, cf. *mina* < *\*minä* ‘I’, *me* < *\*mek* ‘we’ and *sina* < *\*sinä* < *\*tinä* ‘you (Sg)’, *te* < *\*tek* ‘you (Pl)’ and Livonian *mēg* ‘we’, *tēg* ‘you (Pl)’ The first person singular ending *\*-m* has changed into *\*-n* in all the Finnic languages. Although the word-final *\*n* was lost in Livonian, Estonian, and Votic, it was exceptionally preserved only in the first person singular forms in the northernmost Estonian dialects (*‘olen* ‘I am’, *olin* ‘I was’, *oleksin* ‘I were’) and in West Votic, cf. 3.5.5. The second person singular ending *\*t* was subjected to lenition in most Estonian dialects (*‘oled* ‘you (Sg) are’). In South Estonian, however, the word-final *\*t* was lengthened (Võru *olõt* ‘you (Sg) are’).

Formatives of the first and second person plural in the indicative and conditional mood vary in Estonian dialects, cf. *-me* and *-te* in western Coastal Estonian, North Estonian, East Estonian, except Kodavere, and in Mulgi and Tartu South Estonian, except Kambja and Sangaste, *-(m)ma* and *-(t)ta* in eastern Coastal Estonia, North-East Estonian, and Kodavere East Estonian, *-mmO* and *-ttO* in North and East Vaivara, *-mi(q)* and *-ti(q)* ~ *-di(q)* in Võru South Estonian and in Kambja and Sangaste. The second person formative is shortened to *-t* in eastern Võru. Probably the two sets of formatives come from *\*-kme* and *\*-kte*. Here the reconstruction of the initial *\*-k-* is dictated by the occurrence of the formative-initial geminates in Coastal and North-East Estonian, Votic, Ingrian, Finnish, and Karelian plural formatives. Hence, the initial *\*-k-* may have originally been a pluralizer in a former verb form rather than the present tense marker as usually supposed. It agreed with the pluralizer in personal pronouns *\*mek* ‘we’ and *\*tek* ‘you’ at the time when the pronoun was not incorporated into the verb form as yet (Viitso 2001b: 343–344). Changes of *\*e* first of all into *\*ä* in Coastal, North-East, and Kodavere East Estonian, Votic, Ingrian, in the northern and eastern dialects of Finnish, and Karelian, into *\*ö* in Vaivara, Aunus Karelian, several dialects on the western and southern parts of Savo Finnish and into *i* in Võru South Estonian result from individual developments under different influences, as, for example, the personal pronouns *müö* ‘we’ and *tüö* in East Vaivara, cf. 6. The reconstruction of the final pluralizer *\*-k* is dictated by the fact that the formative must have ended in a consonant at the time of vowel apocope in Estonian and is supported by the occurrence of the reflexes of *\*k* at the end of the corresponding formatives in East Votic and in the nominative case forms of the Livonian personal pronouns *mēg* ‘we’ and *tēg* ‘you (Pl)’ The latter arguments make the nasal *-n*, which occurs at the end of the corresponding formatives ending in *-n* in Hevaha Ingrian and in some western and southern

Savo dialects in Finnish, a weaker candidate for a pluralizer. Moreover, the final *\*-n* should be preserved in all Ingrian, Finnish, and Karelian dialects.

The underlying forms of the first and second person plural formatives differ from the corresponding underlying formatives postulated for modern Finnish, Ingrian, and Votic. As the corresponding forms of monosyllabic stems are of Q2, cf. *olgem* 'let us be!' and *olge* 'be!', they must have ended in some consonant. This conclusion fits in the grammars of North and South Estonian from the first half of the 17<sup>th</sup> century, cf. *olcfem* and *olcfet* in Stahl 1637: 11 and Gutsclaff 1648. Here *-m* is the first person plural suffix. In view of the second person singular form *'ole* from *\*olek*, where *\*-k* is the imperative marker that was lately preserved in East Votic, Hevaha Ingrian and in some Finnish dialects, it is not clear whether the lost *-t* of the second person plural formative was originally a pluralizer or a second person formative.

The third person formatives in the present indicative *-b* (Sg) and *-vad* (Pl) come from present participles (*'saab* < *\*sāpa* 'he gets', *'saavad* < *\*sāpat* < *\*sāpat* 'they get'; *'suudleb* < *\*sūtelepa* 'he kisses', *'suudlevad* < *\*sūtelepat* < *\*sūtelepat* 'they kiss'), cf. 7.3 and 3.4.4.2. After an unstressed syllable in the singular, instead of the expected but not attested formative *†-v* (*\*elāpā* > *\*elāpā* > *\*elāvā* > *elāv* > *elav*), at an early stage the strong-grade variant *\*-pA* > *?\*-pi* > *\*p* was generalized in most Estonian dialects and Votic. This generalization was followed by a specific vowel apocope both in Estonian and in Votic already before the gradation as the disyllabic third person forms are in the weak grade both in Estonian (*'annab* 'he gives') and Votic. The third person plural present indicative endings developed into general third-person plural endings in central and eastern North-Estonian, eastern Coastal Estonian, North-East Estonian, and in the main body of South Estonian (Saareste 1955a, Map 121), Votic, Ingrian, Finnish, Karelian, and Veps.

The third person singular forms of the present indicative in South Estonian are peculiar in having either no traces of the formative (*ta* and 'he gives', *ta* 'lätt 'he goes') or the formative *-se* after monosyllabic vocalic stems and *-ss* elsewhere (Võru *mööse* 'he sells', *'käuse* 'he walks', *tennäss* 'he thanks'), for monosyllabic vocalic stems in suppletive formatives *-se* (Sg); in the plural either the formative *-vaq* ~ *-vāq* or *-seq* ~ *-sōq* occurs (*'andvaq* 'they give', *'läävāq* 'they go', *'möövāq* 'they sell', *'käävāq* 'they walk', *'tennäseq* 'they thank'). The formatives *-se* and *-ss* are identical to the third person present indicative suffix of the reflexive conjugation *-ksen* in East Finnish and *-ze* in Veps and go back to *\*-ksen* where *\*-k-* is the present tense marker and *-sen* a pronoun stem, historically identical to *hin-* in South Estonian *'hindä* 'oneself's (GSg)' and Ingrian, Finnish, Veps *hän* 'he, she'

### 8.2.1.3. Passive

The impersonal voice was long called the passive and is still called the passive in the Finnish linguistic tradition. Still in Võru South Estonian for the third person forms passive can be used, e.g. *'Kuis 'taa 'kutsutass?* 'How is this one over here called?', *'Kuis 'naaq 'kutsu 'tasõq?* 'How are these ones here called?' Wiedemann (1864: 42) attested alongside similar third-person present indicative forms a full imperfect paradigm. Otherwise full paradigms of the passive present and imperfect indicative were attested first by Johann Gutsclaff (1648) and later only in 1939–1940 by Hella Keem in Rõuge and Hargla (Keem 1997: 53). An attempt to revive the full passive paradigms is now being made in the Võru literary language. It is possible that the first and second person forms were built by analogy with the third-person forms, which, similarly to the impersonal forms, have their roots in the former reflexive conjugation, cf. 8.1.2. Still the few examples of the Võru passive resemble rather the Russian reflexivization of transitive verbs than the proper reflexive conjugation of the Russian or Veps verbs, cf. *ja nazyvajus* 'I'm called', *ty nazyvaješ'sja* 'you (Sg) are called', *on nazyvajetsja* 'he is called' etc.

## 8.3. Mood

Alongside the universal morphologically unmarked indicative mood with its two simple tenses also the conditional and imperative mood have their roots in Proto-Finnic. The quotative and the jussive developed later. Estonian has lost the potential mood whose traces still occurred in South Estonian literary language.

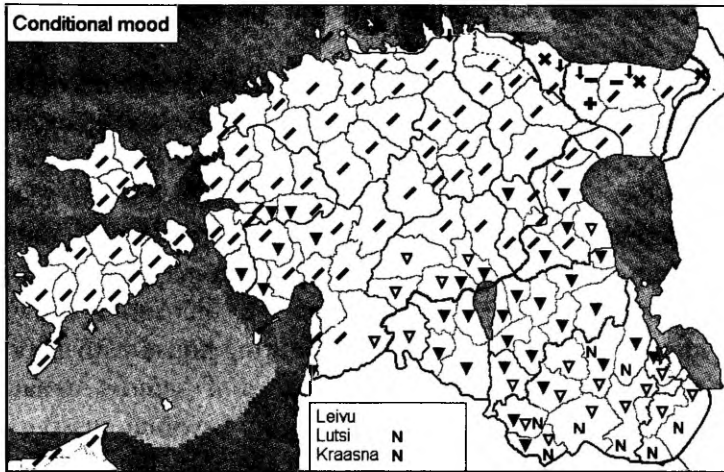
### 8.3.1. Conditional

In Estonia two Finnic conditional mood markers meet: *\*-ksi* is shared by North, East South Estonian, and Livonian, the marker *\*-isi* by Kuusalu and western Haljala Coastal Estonian, Votic, Ingrian, Finnish, Karelian, and Veps. In addition, contaminations of the two markers occurred elsewhere in Coastal Estonian and East Estonian. In South Estonian, southern East Estonian, and in the north-western part of Pärnumaa, the cluster *ks* of the marker was assimilated to *ss* and often de-geminated to *s*, cf. Figure 22. There exists a tendency to drop the personal endings in the conditional mood under the influence of the usage of the central and southern parts of Estonian.

### 8.3.2. Quotative

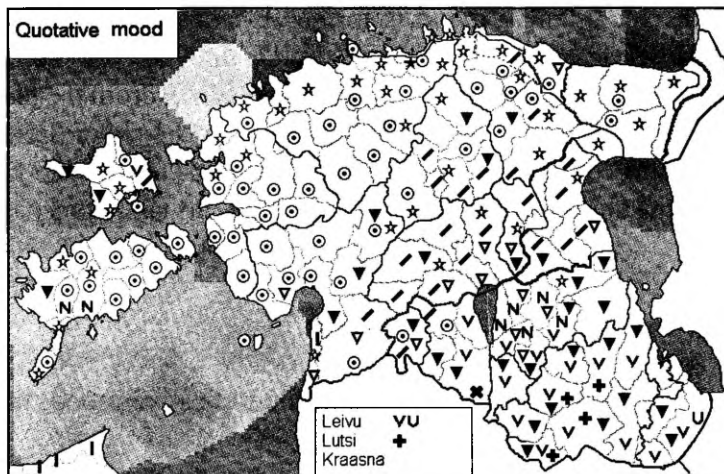
Most Estonian dialects and Livonian have developed the quotative mood to express the reported indirect reality for which the speaker does not want to be responsible. The quotative formatives in Estonian dialects go back to different sources: (a) the nominative form of the present participle (-v, -u), (b) the genitive form of the present participle (probably -va and -be), (c) the partitive form of the present participle (-vat ~ -vet, -vad ~ -ved ~ -ad), (d) the (former) potential mood form (-na), (e) agent noun (-ja), (f) supine illative (-ma), (g) infinitive (-da ~ -de, -ta ~ -te, -a). The formative -bev ~ -bõv contains two allomorphs of the present participle marker, cf. Figure 23. In addition, North Estonian has quotative constructions with the infinitive, present or past indicative forms of the verb *pidama* 'must' and the supine illative forms of the main verb (*ma* 'kuulsin, et ma *pidada* ~ *pean* ~ *pidin* 'olema' *haige* 'I heard [that people rumour] that I be ill'); Figure 23 does not distinguish between infinitives used as quotative forms and constructions of the type *pidada* + supine illative ('*pidada* *olema*). Quotative forms based on participles and supine as *ta olevat* ~ *ta olema* 'he is said to be' have obviously arisen from phrases where an impersonal verb form ('*õeldakse* 'someone says', *räägi* 'takse' ~ '*kõnel* 'dakse' 'someone speaks', *arva* 'takse' 'someone thinks' etc.) has been dropped, e.g. *ta* 'õeldakse *olevat* 'haige 'he is said to be ill' > *ta* 'olevat 'haige.

According to Metslang and Pajusalu (2002), both the quotative in -va/-vã and -na occur in the western Tartu dialect. -va/-vã refers to an action that takes place in the actual present time, and -na to a more indefinite present time. The corresponding past actions are expressed by the *nu*-marked past participle (simple past quotative) and *olna* + the *nu*-marked past participle of the main verb (perfect quotative). Differently from all the other types of quotative, the *na*-quotative takes personal endings in plural. The quotative in -ja has a similar parallel in Livonian, except that in Livonian the quotative is regularly used also for indirect speech and has a singular and a plural form.



**Figure 22.** Formatives of the conditional mood in Estonian dialects after Andrus Saareste (1955a, Map 55), modified

**Key:** / -*ks(i-)*, ▽ -*ss(i-)*, ▽ -*si(q)*, ▽ -*s*, I -*is(i)*, ↓ -*s(i)*, + -*isesi*, - -*ses(i)*, × -*iks(i)*, N -*nuq* ~ -*nüq*.



**Figure 23.** Formatives of the quotative mood in Estonian dialects after Andrus Saareste (1955a, Map 44) and Arnold Kask (1984: 253), modified

**Key:** ▽ -*vat* ~ -*vet*, -*vad* ~ -*ved* ~ -*ad*, ▽ -*va*, ▽ -*v*, U -*u*, × -*be*, + -*bev* ~ -*bõv*, N -*na*, I -*ja*, / -*ma*, ⊙ -*da* ~ -*de*, -*ta* ~ -*te* ~ -*a*; analytic constructions: ☆ *peab* + supine illative, ★ *pidi* + supine illative.

### 8.3.3. Imperative and jussive

In North Estonian and Livonian the former third person forms of the imperative mood expressing a request, order, or prohibition that the listener should convey to a third party (*'Mari 'oodaku 'mind 'kodus 'Mary be waiting for me at home!'*) developed into the jussive mood to express also an action that one is compelled to do or not to do by someone (*'Mina 'käigu 'sinu 'tahtmist 'mööda 'I be behaving according to your way!'*), a necessity (*'Vett 'kraanist ei 'tule, 'meie 'kandku 'naaber majast 'ämbriga 'there comes no water from the tap, we should carry it from the neighbouring house with a bucket'*) or a concession (*'Räägi 'tagu mis 'tahes, 'see ei 'aita 'midagi 'whatever they say, it will be of no help'*). Unlike Estonian, the Livonian jussive mood has singular and plural forms that are usually preceded by the particle *laz* 'let'

### 8.3.4. Optative

In the intimate speech style of the south-western mainland dialects on the Latvian border the optative mood is formed by means of the marker *-kest* (Karksi *'võtakest [ve'takkest] 'you should take!'*, *'tulekest 'you should come!'*, Halliste *'süvväkest 'you should eat!'*) where *-ke-* comes from the usual nominal diminutive suffix (Pajusalu 1989: 142, 1996: 161–162). Lembit Vaba (1992) demonstrated that the formation of this mood, called the DIMINUTIVE OPTATIVE by Pajusalu, follows the pattern used in Latvian nursery language.

## 8.4. Tense

Verb in Estonian has two simple tenses in the indicative mood: the present tense and the imperfect tense.

### 8.4.1. The present indicative

The present tense suffix *\*-k-* is preserved in the present impersonal formative *-kse* (*'ollakse 'someone is'*, *'saadakse 'someone receives'*, *'antakse 'someone gives'*) and is lost at the end of the negative form of the present indicative, cf. (*'ei) 'saa, ('ei) 'ole, (ei) 'anna* from *\*sāk, \*olek, \*anīak*). Still the present impersonal formative *-kse* has undergone the change *ks > ss* in North-East, East and South Estonian as well as in Votic inland dialects. In Coastal Estonian and its neighbourhood, Vaipooli Votic, Ingrian, Finnish,

Karelian, Lude and Veps, the formative underwent the changes *\*-ksen* > *\*-sen* > *\*-hen* > *\*-hAn*, cf. Coastal Estonian *lueda* ~ *luetta* 'someone reads', Votic *lugõtaa*, Finnish *luetaan*, Kar *luvetah*, North Veps *lugetaze*.

The present indicative third person suffixes *-b* (Sg) and *-vad* (Pl), cf. 8.1.2, and the present participle suffix *-v* *-va*, cf. 7.3, have developed from the common underlying form *\*-pA* (i.e. *\*-pa* ~ *\*-pā*). The initial stop was first regularly weakened to *\*p̃* after the vowel of an unstressed syllable because of the so-called suffixal gradation and after the vowel of a stressed vowel in a closed syllable because of radical gradation and later underwent the change *\*p̃* > *\*v*.

### 8.4.2. The imperfect

In Standard Estonian, 17 verbs have the imperfect marker *-i(-)* that can be traced back via the similar Proto-Finnic marker *\*-i(-)* to Proto-Uralic (*\*sai* 'he got', *\*tuli* 'he came', *\*pidi* 'he had to').

A group of verbs with weakening gradation and a long initial syllable including one verb with the *e*-stem (*\*tundis* 'he felt') among verbs with the *a*-stem have the imperfect marker *-is* and elsewhere the marker *-si-* in the third person singular form. All the other verbs have in the third person singular form the marker *-s* and elsewhere the marker *-si-* (*\*viis* 'he took (something where)'), *\*magas* 'he slept', *\*elas* 'he lived', *\*kutsus* 'he invited', *\*hüppas* 'he jumped', *\*suudles* 'he kissed'). Traditionally, the rise of all *s*-markers has been explained by re-analysing the imperfect forms of the so-called contracted verbs of the types *\*magama* 'to sleep' and *\*hüppama* 'to jump', whose trisyllabic stems *\*makata-* and *\*hüppätä-* lost their stem vowel *\*a* or *\*ā* before the imperfect suffix *\*i* and underwent the change *\*ti* > *\*si* (*\*makati* > *\*makasi*, *\*hüppäti* > *\*hüppäsi*). After the weakening in the framework of suffixal gradation and the later loss of the stop in the third syllable (*\*makata-* > *\*makatā-* > *\*makā-*, *\*hüppätä-* > *\*hüppätā-* > *\*hüppā-*) the sequence *-si-* was reanalysed as an imperfect suffix and applied to other verb types where fusion of the stem vowel and the imperfect suffix and vowel apocope resulted in opaque morphology. Because of certain common difficulties in explaining North Estonian, East Estonian, and Livonian imperfect markers containing a sibilant, Viitso (1998b) proposed that (a) the North and East Estonian imperfect marker *-s(i)-* and the Livonian marker *-ž* after monosyllabic vocalic stems, and (b) the North Estonian imperfect marker *-is* and the Livonian marker *-iz* stem from the Finno-Ugric preterite marker *\*-ś-*. Similarly, the marker *-s(i)-* of Kodavere East Estonian and South Estonian auxiliary negation verb, cf. 8.5, must be traced back to the Finno-Ugric marker *\*-ś-*.

### 8.5. Negative

In North Estonian and the northernmost East Estonian dialects, the former Finnic auxiliary negation verb (still present in Coastal and North-East Estonian) degenerated into a non-inflecting negation particle *ei* ‘not’ that is used in the present indicative together with special personal and impersonal negative forms of the main verb. In the imperfect indicative the negation particle is used with the personal and impersonal past participles of the main verb, in the conditional mood with the personal and impersonal conditional mood stems. Historically, *ei* is the third person singular form of the negation verb. The negative form of the main verb as used in the present indicative of the personal mood is a pure vocalic stem and identical to the second person singular form of the imperative mood. Historically, both the negative present indicative personal form of the main verb and the second person form of the imperative ended in *\*-k* as attested in East Votic and Hevaha Ingrian. Similarly, the impersonal negative form of the present indicative ended in *\*-k*, cf. the development of the personal and impersonal negative forms of the verb *andma* ‘to give’: *\*antak* > *\*anīak* > *\*annak* > *anna*; *\*antettak* > *\*anīettak* > *\*annettak* > *anta*. The pattern of negative constructions containing a universal negation particle with no tense distinction followed by different tense forms of main verbs is shared by Coastal and North-East Estonian, Votic, Ingrian, Karelian, Veps, and most Lappic languages which still retain the former negation verb with no tense distinction (model A). Other Estonian dialects, notably southern East Estonian, South Estonian, and its neighbouring North Estonian dialects in Pärnu- and Viljandimaa, Insular Estonian, and some coastal parishes in northern Pärnumaa use a different pattern in the present and past indicative, based on the use of different tense forms of the negation verb, cf. *ei* ‘do(es) not’ in the present tense and *es* (in Hargla and Leivu *is*) ‘did not’ in the imperfect (model B). In Kodavere East Estonian, as spoken in the first half of the 20<sup>th</sup> century, the negation verb still had retained all its personal forms, cf. 1Sg *esin*, 2Sg *esid*, 3Sg *es*, 1Pl *esimä*, 2Pl *esitä*, 3Pl *esiväd*. Model B is shared with Livonian, South, Pite and Lule Lapp, and Erza Mordvin.

	Model A		Model B	
Present	<i>ei</i>	<i>anna</i>	<i>ei</i>	<i>anna</i>
Imperfect		<i>andnud</i>	<i>es</i>	

Differently from modern Estonian, the main verb in the present and the imperfect has plural personal endings in the western part of Tartu South Estonian, namely in Rannu, Puhja and Nõo (*te ei massate* ‘you (Pl) do not pay’),

cf. Keem 1970: 41. The main verb takes personal endings in the negative also in Livonian; plural forms differ from singular forms also in Lude and Veps (Viitso 2003). Only the third person plural of the main verb takes personal endings in the negative in the main body of Tartu South Estonian and its neighbouring parishes of Võru and Mulgi South Estonian. The third person plural ending *-vad* is added to the past participle of the main verb in the negative of past tenses in the northern Tartumaa (*ei söönuvad* 'they did not eat'). Somewhat similarly only the main verb adds a formative also in North and South Karelian.

In Setu, the negation verb occurs after the main verb. The negation verb often follows the main verb also in Veps, especially in Central and South Veps. As in Setu the negation verb leans to the main verb, the first vowel of the negation verb takes the quality of the final vowel of the main verb, except after the raised long vowels *ū, ü, ī* in initial syllables of quantity 3, where the corresponding high vowels *u, ü, i* occur. In North Setu the negation verb forms developed into suffixes and the initial syllable of the former negation verb and the stem vowel of a main verb or, for the third person plural, the last vowel of the personal ending are contracted and often fused, except where preceded by a vowel of the initial syllable, cf. [*sŷ.üi?*] 'do(es) not eat', [*sŷ.üš*] 'did not eat' vs. [*sõvā-i?*] 'they do not eat', [*ku.a-i?*] 'do(es) not weave', [*ku.äš*] 'did not weave', [*kuava-i?*] 'they do not weave', [*añna-i?*] 'do(es) not give', *añná-š* 'did not give', [*añnava-i?*] 'they do not give', [*uṁblē-i?*] 'do(es) not sew', [*uṁblē-š*] 'did not sew', [*u:ṁblēva-i?*] 'they do not sew'

### Abbreviations of dialects

An abbreviation consists of 2–3 components: (a) the language abbreviation (two letters), (b) the dialect abbreviation, based on the dialect name in Estonian or Finnish for Estonian and Finnish dialects, and (3) an occasional subdialect specification consisting of standard English abbreviations for compass points or the abbreviation **C** – central.

ESTONIAN (**Es**): **CoE** – eastern Coastal Estonian, **CoVai** – Vaivara Coastal Estonian, **CoW** – western Coastal Estonian; **E** – East Estonian, **EKod** – Kodavere East Estonian; **N** – North Estonian: **NCN** – northern Central North Estonian, **NCS** – southern Central North Estonian, **NE** – North-East Estonian, **NHa** – Harjumaa North Estonian, **NIns** – Insular North Estonian, **NW** – western North Estonian, **NViC** – central Virumaa North Estonian, **NViW** – western Virumaa North Estonian, **NSt** – Straits North Estonian; **S** – South Estonian: **SM** – Mulgi South Estonian, **ST** – Tartu South Estonian, **SV** – Võru South Estonian (**Lut** – Lutsi)

INGRIAN (**In**): **H** – Hevaha, **LL** – Lower Luga, **S** – Soikkola

FINNISH (**Fi**): **FiE** – East Finnish: **SE** – South-East Finnish (**Nar** – Narvusi), **S** – Savo (**Ver** – Vermland Savo); **FiW** – West Finnish: **EP** – Etelä-Pohjanmaa, **H** – Häme, **KPP** – Keski- and Pohjois-Pohjanmaa, **N** – North Finnish (Pohjola)

KARELIAN (**Ka**): **A** – Aunus or Livvi (Olonec), **N** – North Karelian, **S** – South Karelian (**Dj** – Djorža, **Sel** – Selissa (Tihvin), **Tol** – Tolmačču, **Val** – Valdai, **Ves** – Vessi)

LIVONIAN (Li): E – East Livonian, W – West Livonian

LUDE (Lu): LuP – proper Lude, LuK – Kuujärvi Lude

VEPS (Ve): C – Central Veps, N – North Veps, S – South Veps

VOTIC (Vo): E – East Votic, VoK – Kukkuzi, W – West Votic

## Abbreviations of morphological categories

**Abe** – abessive, **Abl** – ablative, **Ade** – adessive, **All** – allative, **Com** – comitative, **Ela** – elative, **Ess** – essive, **G** – genitive, **Ill** – illative, **Ine** – inessive, **N** – nominative, **P** – partitive, **Pl** – plural, **Sg** – singular, **Ter** – terminative, **Trl** – translative

**1Pl** – 1<sup>st</sup> person plural, **1Sg** – 1<sup>st</sup> person singular, **2Pl** – 2<sup>nd</sup> person plural, **2Sg** – 2<sup>nd</sup> person singular, **3Pl** – 3<sup>rd</sup> person plural, **3Sg** – 3<sup>rd</sup> person singular, **Act** – active, **Aff** – affirmative aspect, **Cnd** – conditional mood, **Ger** – gerund, **Imp** – imperative mood, **Ind** – indicative mood, **Inf** – infinitive, **Ipf** – imperfect tense, **Ips** – impersonal voice, **iv** – intransitive verb, **Jus** – jussive mood, **Neg** – negative, **Pf** – perfect tense, **Pr** – present tense, **Ps** – personal voice, **Pss** – passive voice, **Ple** – participle, **Quo** – quotative mood, **Sup** – supine, **tv** – transitive verb

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# III.

## ESTONIAN DIALECTS\*

*Karl Pajusalu*

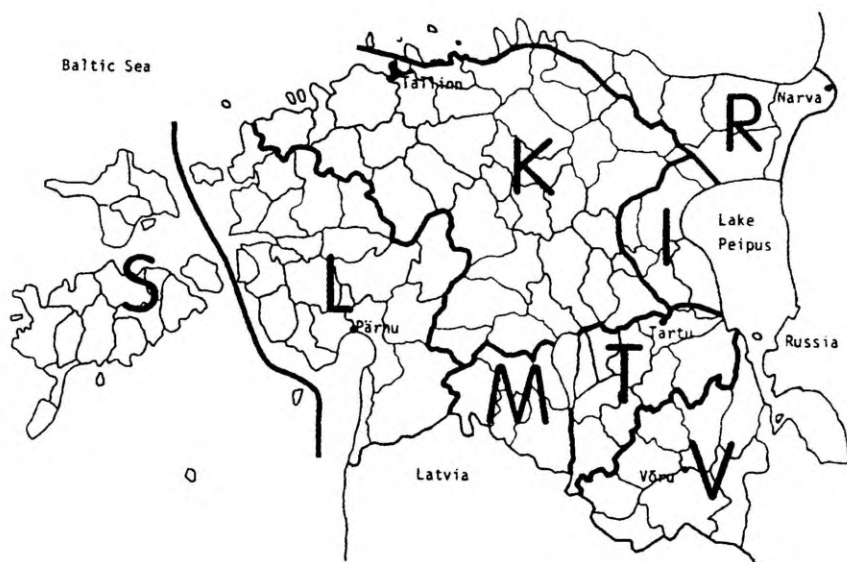
The article provides an overview of the history and main research areas of Estonian dialectology and the main features of Estonian dialects. It describes the more important data collections of Estonian dialects. The article deals more closely with the synchronic dialect classifications. Of the research methods emphasis is placed on dialect geography, dialectometric studies, and socio-dialectology. Levelling and emancipation of the Estonian dialects will also be under consideration.

### 1. On the concept of the Estonian dialect area

In Estonian dialectology dialects are usually grouped on at least three levels (Kask 1956, Pall 1994a, Pajusalu 1999a). The first distinction concerns dialect groups. Their number is usually three: (1) the North-Eastern Coastal Estonian dialect group (R) includes the northern coastal and north-eastern dialects; (2) the North Estonian dialect group is composed of the central (K), eastern (I), insular (S), and western (L) dialects; (3) the South Estonian dialect group consists of the Mulgi (M), Tartu (T), and Võru (V) dialects, see Map 1. Sometimes the north-eastern coastal dialects and the North Estonian dialects are combined into the main North Estonian dialect, in which case South Estonian remains the other main dialect. A few researchers have singled out the Setu dialect from the Võru dialect of South Estonian. There is a tradition to further subdivide the dialects into sub-dialects, which usually follow the borders of the historical parishes. Thus, Estonia is usually divided into three dialect groups, 8–10 dialects, and 105–120 sub-dialects. These dialects reflect the usage of the second half of the 19<sup>th</sup> century and the beginning of the 20<sup>th</sup> century.

When dealing with Estonian dialects one has at first to bear in mind that linguistically Estonia is a cutout with conventional borders from a broader Finnic dialect continuum (for diachronic dialect division see the article by Tiit-Rein Viitso “Rise and development of the Estonian language” in this volume). The state frontier between Estonia and Russia has served as the

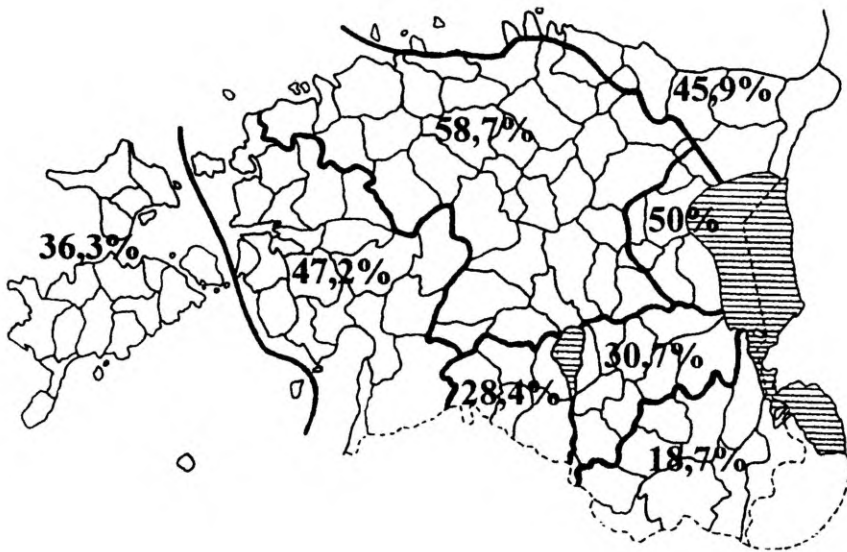
\* The study was supported by grant no. 4404 of the Estonian Science Foundation.



**Map 1.** Estonian dialects and the neighbouring areas

border between the close North-Eastern Estonian dialect and the Votic language. In the southern part the state frontier does not coincide with the linguistic border; the Setu dialect of South Estonian has been spoken on both the Estonian and Russian sides of the border. During its establishment the border between Estonia and Latvia usually followed the linguistic border although this belt has extensive mixed settlement, where some South Estonian dialect areas remained as linguistic enclaves on the Latvian side. Long time ago the south-western dialect area transformed into the now extinct Salaca Livonian area. The Livonian language, which is spoken in Courland in north-western Latvia shares a number of developments with the Saaremaa dialect spoken on the other side of the Strait of Courland. The coastal dialect that has been spoken on the southern coast of the Gulf of Finland in North Estonia shares a number of features with the Finnish dialects spoken on the northern coast of the Gulf of Finland.

Similarly to the Estonian language area, its neighbouring varieties of the Finnic dialect continuum show close resemblance to each other, and the differences increase gradually. Which Finnic dialects are regarded as Estonian dialects largely depends on the political and ethnic history of Estonia and its neighbouring areas and is not based on linguistic criteria. For example, the Votic language and the Setu dialect differ from Standard Estonian to the similar extent. Why Votic is a language and Setu is not can be explained by different ethnic and political histories. Below we will discuss the Estonian dialects within the traditional framework, that is, they will be regarded as Finnic varieties that are or have been spoken traditionally on the Estonian territory.



**Map 2.** Percentage of common features between the Estonian dialects and Standard Estonian (Pajusalu 1997, Figure 2)

It should be mentioned that contemporary Standard Estonian is distinct from all the historical Estonian dialects, including those spoken by people who were born in the second half of the 19<sup>th</sup> century. When comparing 135 phonetic and grammatical norms and core vocabulary of Standard Estonian with their occurrence in dialects (for a more detailed discussion see Pajusalu 1997), we will see that all the dialects are rather remote from the standard language (the difference is over 40% for any dialect), see Map 2.

It has been usually thought that Standard Estonian is based on the historical vernacular of the central part of North Estonia. The dialects of this region contributed some of the remarkable phonetic peculiarities of Standard Estonian, such as the three distinctive phonological quantities, the illabial central vowel *õ*, and lacking of marked vowels in non-initial syllables. This usage served as the basis for the basic grammatical structure and core vocabulary of Standard Estonian. As Map 2 shows, despite this fact the contemporary standard language and the historical central dialect differ remarkably from each other. In fact, Standard Estonian is a compromise between various dialects, conscientious language reform, and recent influences of foreign languages and cannot be traced back to any historical dialects. At the same time, it is evident that the North Estonian dialects share many more features with the standard language than the South Estonian dialects. The insular dialect, which is spoken in the specific Swedish contact area, is the remotest North Estonian dialect; however, it reveals more similarities with the standard language than the Tartu dialect, which is the closest South Estonian dialect to

the standard language. The Võru dialect that forms the core area of South Estonian is so different from the standard language that it is possible to regard it linguistically as a separate language. Speakers of Standard Estonian can only partly understand the Võru dialect. At this, the Setu dialect, which most dialectologists regard as a sub-dialect of Võru, shows the greatest difference.

## 2. A brief survey of history and fields of Estonian dialectology

The history of describing and studying the Estonian dialects is as old as the history of recording and research into the Estonian language. At the time when the first Estonian-language texts were recorded in the 16<sup>th</sup> century every corner of Estonia had its own dialect usage. Already the catechism by Wanradt-Koell (1535) notes that Estonian is spoken differently in various parts of Estonia, for example, in Tallinn, Narva, and Tartu. Thus, the first records of the Estonian language are actually dialect texts. Occasional data and discussions concerning the dialects and their differences can be found throughout the centuries, starting with the first written records of the Estonian language (for a more detailed discussion see Kask 1984, Pajusalu *et al.* 2002).

More systematic descriptions of the Estonian dialects appeared in the 19<sup>th</sup> century. The journal *Beiträge zur genauern Kenntniß der ehstnischen Sprache*, published by Heinrich Rosenplänter in 1813–1832, included dialect texts and dialect words, as well as articles dealing with specific dialectal features. The founder of Estonian dialectology, however, is Ferdinand Johann Wiedemann. Wiedemann, member of the St. Petersburg Academy of Sciences, conducted extensive fieldwork and was the first to publish studies on Estonian dialects that have not lost their scientific value to this day. His study of the Võru dialect *Versuch ueber den Werroehstnischen Dialekt* (1864) is the first thorough description of an Estonian dialect. Wiedemann characterized all the Estonian dialects in his article *Ehstnische Dialekte und ehstnische Schriftsprache* (Wiedemann 1873). Jakob Hurt, who is better known as a folklorist, also made an important contribution to Estonian dialectology. The dissertation by Hurt on the *ne*-suffixed adjectives *Die estnischen Nomina auf -ne purum* (1886) was a groundbreaking study in Estonian historical-comparative dialectology. Mihkel Veske was another scholar who introduced the historical-comparative method to the study of the Estonian language and dialects. Veske focused on the analysis of phonetic phenomena and conducted fieldwork in North Estonia in 1875–1884. It was especially important for

him, however, to clarify the essence of the so-called Central Tallinn dialect or the central North Estonian dialect which was regarded as a basis of the standard language.

Among the Finnish researchers of Estonian dialects one should first of all mention Lauri Kettunen. In 1909–1912, while working on his dissertation, he carried out a comprehensive study of the Kodavere eastern dialect and its neighbouring dialects along the shore of Lake Peipsi. He was the first to apply the methods of experimental phonetics to the study of Estonian dialects in his monographs *Lautgeschichtliche Untersuchung über den Kodaferschen Dialekt* (Kettunen 1913) and *Lautgeschichtliche Darstellung über den Vokalismus des Kodaferschen Dialekts mit Berücksichtigung anderer estnischer Mundarten* (Kettunen 1913–1914).

Estonian dialectology developed into a branch of linguistics with its own methods and specific ways of collecting materials in the 1920s. During the inter-war period the study of dialects became an important branch of Estonian linguistics. Since the 1930s the trends of dialect study have witnessed constant diversification. The Estonian dialects have been studied by the methods of dialect geography, experimental phonetics, historical phonology and morphology, dialectometry, to name a few. A serious problem of the final decades of the 20<sup>th</sup> century was the levelling of dialects, which sparked interest in the sociolinguistic study of dialects. The possibilities of electronic data processing have opened up totally new prospects, for example, automatic analysis of dialect grammars. Below you will find an account of all this.

Andrus Saareste, professor at the University of Tartu, became the leading Estonian dialectologist of the inter-war period. His main interest focused on the vocabulary of the Estonian dialects. The year 1924 saw the publication of Saareste's dissertation *Leksikaalseist vahekordadest eesti murretes I* 'About the lexical relationships in Estonian dialects I', where he related the analysis of dialect vocabulary to the method of dialect geography. The latter method sparked his interest in the synchronic classification of the Estonian dialects. Saareste's study *Eesti keeleala murdelisest liigendusest* 'About the dialect classification of Estonian' (published in the journal *Eesti Keel* 'Estonian Language', Saareste 1932a) served as a basis for subsequent dialect-geographic treatments and synchronic dialect classifications in Estonia. Saareste's life work comprised the atlases of Estonian dialects (*Eesti murdeatlas* 'Estonian dialect atlas' (Saareste 1938, 1941); *Petit Atlas des parlers estoniens* (Saareste 1955a)) and the comprehensive *Eesti keele mõisteline sõnaraamat I–IV* 'Conceptual dictionary of Estonian I–IV' (Saareste 1958–1963). Saareste also initiated systematic collection of the Estonian dialects (see also section 4).

The 1930s witnessed a number of methodologically important studies of Estonian dialects. In addition to the previously mentioned dialect atlas and

the synchronic classification of the Estonian dialects by Saareste, one should mention the dissertation *Hiiu murrete häälikud* 'Sounds of the Hiiu dialects' by Paul Ariste (1939a), which stands out for its versatile experimental phonetic analysis. The late 1930s also saw the publication of collections of commented dialectal texts in phonetic transcription, for example, *Ida-Vaivara murdest* 'About the eastern Vaivara dialect' by Mihkel Toomse (1938) and *Murdenäiteid Pühalepa kihelkonnast* 'Dialect samples of Pühalepa parish' by Ariste (1939b). In the second half of the 1930s Julius Mägiste, then Professor of Finnic languages at the University of Tartu, conducted fieldwork in Setumaa in several summers. He carried out studies on dialectal word formation and inflection. (See Mägiste 1977.)

After the Second World War Estonian dialectology developed in the direction of refining the descriptive dialect surveys and diversifying the data collections; on the other hand, the methodological research area was broadened. The post-war years saw the development of the department of dialectology at the Institute of Language and Literature (founded in 1947) into the research centre of the Estonian dialects. Its largest project was the compilation of a comprehensive dictionary of Estonian dialects under the supervision of Aili Univere, Mari Must, Valdek Pall, and Helmi Neetar, which took up several decades (see section 3).

In the 1950s and the 1960s Arnold Kask, Professor of the Estonian language at the University of Tartu, became one of the most outstanding researchers of the development of the Estonian dialects, the dialect background of the standard language, and the history of studying the Estonian dialects. The importance of his article *Eesti murrete kujunemisest ja rühmitumisest* 'About the development and classification of the Estonian dialects' (Kask 1956) is comparable in its time to the study by Andrus Saareste "About the dialect classification of Estonian" (Saareste 1932a). In 1962 Kask published a comprehensive monograph *Eesti kirjakeele murdelise tausta kujunemisest* 'About the development of the dialect background of Standard Estonian' (Kask 1962). The main dialect studies by Kask were published in the collection of articles *Eesti murded ja kirjakeel* 'Estonian dialects and the standard language' (Kask 1984).

The past decades have seen the publication of hundreds of studies on various features of the Estonian dialects (see a bibliography in Pajusalu *et al.* 2002).

**In phonetics and phonology** the following topics have been dealt with: vowel harmony (Wiik 1988, Help 1991, Kiparsky, Pajusalu 2003), intonation (Niit 1985), South Estonian vowel system (Pajusalu *et al.* 2000a) and prosody (Pajusalu *et al.* 2001), prosodic features of folk songs (Ross, Lehiste 2001). Phonological surveys are represented by studies of the South Esto-

nian dialects, for example, the Rõngu sub-dialect of the Tartu dialect (Hint 1965, Hint, Paunonen 1984) and northern Setu (Viitso 1990a, 1990b).

**Inflectional morphology** is represented by surveys of the grammar of such dialects as the north-eastern coastal dialect (Must 1987) and Võru (Keem 1997). There are also studies of inflectional verb types in Setu South Estonian (Toomsalu 1995) and the variation of verb inflection in Karksi South Estonian (Pajusalu 1996). The introductions to the academic text volumes of Estonian dialects provide a survey of the most important phonetic and morphological features (see section 3).

The study of **morphosyntactic categories** has focused on the specific categories such as the oblique mood (Kask 1984, Metslang, Pajusalu 2002), the jussive, and the optative (Pajusalu 1989). **Syntax** is represented by studies of agreement (Neetar 1965), negative sentences (Sang 1975), and word order (Lindström 2000). In **word formation** compounding (Riikoja 1960), patterns of adjective formation (Viires 1963), and nominal derivation (Neetar 1990) have been studied.

**Lexical studies** are especially abundant. Comprehensive studies have been published on Latvian (Vaba 1997) and Russian loanwords (Must 2000) and on various conceptual fields such as bird names (Mäger 1967), plant names (Vilbaste 1993), and names of colours (Oja 2001). Dissertations about the specific lexical features of the north-eastern coastal dialect (Söderman 1996) and South Estonian (Koponen 1998) have been completed in recent years. There are also several profound studies of **place names**, for example, concerning northern Tartumaa (Pall 1969, 1977) and Saaremaa (Kallasmaa 1996, 2000). The more recent dialectometric studies are based on electronic lexical databases (see section 5).

The study of **dialect levelling** and **dialect sociology** is the most recent branch of Estonian dialectology (see Hennoste *et al.* 1999). Actually, dialect levelling has been studied since the 1960s (Parbus 1966). Studies of the usage of several generations date from the second half of the 1980s (Pajusalu 1987, Grigorjev *et al.* 1997, Pajusalu *et al.* 1999). Sociological studies have been launched only recently, and their aim has been to focus on the use and status of South Estonian dialects (Eichenbaum, Pajusalu 2001a, 2001b; see also section 6).

### 3. Data collections

The most extensive collections of Estonian dialect materials are located at the Institute of the Estonian Language in Tallinn. The dialect archive of the Institute of the Estonian Language contains more than four million word

slips and nearly 600,000 place-name slips. There are about 50,000 pages of dialect texts and 80,000 pages of dialect surveys and other descriptive materials. The sound recordings amount to nearly three thousand hours (see Viikberg ed. 1997). The general card index of dialect words was used to compile the two-volume *Väike murdesõnastik* 'Shorter dialect dictionary' (VMS). It served as a basis for the electronic wordlist of the Estonian dialect dictionary with data about occurrence and basic meanings. This electronic lexical database of Estonian dialects was soon applied to the first dialectometric studies of Estonian dialects (see section 5). The phonetic variants, inflections, and meanings are thoroughly covered by *Eesti murrete sõnaraamat* 'A dictionary of Estonian dialects' (EMS), the first fascicle of which came out in 1994. By 2003 13 fascicles (*a – kooratama*) had been published. In addition, a few dictionaries of individual dialects have been published, the first one being *Idamurde sõnastik* 'A dictionary of the eastern dialect' by Valdek Pall (1994b).

The academic collections of dialect texts in phonetic transcription are also compiled by the Institute of the Estonian Language. Each publication of dialect texts includes a general overview of the specific features of one dialect, texts representing all the sub-dialects, a list of rare dialect words and subject indices. The series was opened by Mulgi dialect texts (Tanning 1961), followed by texts in the central (Must 1965) and Tartu dialects (Keem 1970). After a longer pause, the series was resumed in recent years by publishing texts in the north-eastern coastal (Must 1995), eastern (Univere 1996), western (Juhkam, Sepp 2000), Võru (Keem, Käsi 2002) and insular (Lonn, Niit 2002) dialects. Thus, there are available authentic text materials covering all the Estonian dialects.

Another major archive of Estonian dialects is located at the University of Tartu. It comprises about 25,000 pages of dialect texts, 80,000 pages of unpublished dialect surveys, and about 1,400 hours of sound recordings. The University of Tartu and the Institute of the Estonian Language have started a large-scale joint project to set up an electronic corpus of Estonian dialects. In this corpus the phonetically transcribed dialect texts are related to the underlying sound recordings, which allows for accurate phonetic and phonological analyses. The tagging of grammatical phenomena has begun in order to enable automatic morphological and syntactic analyses. At the end of 2002 the corpus was comprised of about 400,000 running words from 30 sub-dialects. The corpus has already served as a basis for dialect studies (Lindström *et al.* 2001).

#### 4. Estonian dialect geography and synchronic classifications of dialects

Andrus Saareste introduced the method of dialect geography to the study of the Estonian dialects. Saareste writes in the introduction to the first part of his “Estonian dialect atlas” (Saareste 1938) that during his studies at the University of Helsinki in 1913–1917 when exploring the French *Atlas linguistique de la France* by Gilliéron and Edmont it had occurred to him that dialect geography could also be applied to the description of differences between the Estonian dialects. Saareste compiled the first questionnaire for the purpose of the Estonian dialect atlas in 1918. In the early 1920s he introduced the method in Estonia, and in 1922 he started systematic preparations for the compilation of the Estonian dialect atlas. Saareste employed the method of dialect geography in his dissertation “About lexical relationships in Estonian dialects I” (Saareste 1924), where he presented 60 distribution maps. Contemporary reviews regarded the book as a groundbreaking study in the Finno-Ugric linguistics (Kettunen 1924).

Saareste introduced the principles and concepts of dialect geography to the Estonian reader also in his study about the dialect classification of Estonian (Saareste 1932a; the German version in *Die estnische Sprache* (Saareste 1932b)). It is the first grouping of the Estonian dialects that is based on the strict methods of dialect geography. The first part of his “Estonian dialect atlas” (Saareste 1938) discusses the possibilities of linking dialect geography and the study of language dynamics. The publication of the dialect atlas was followed by considerable discussion of the methods of dialect geography. When reviewing Saareste’s dialect atlas Kettunen thought that it would be more practicable to provide schematic synthesizing maps (Kettunen 1939). By contrast, Saareste prefers precise quotation maps, which enable other researchers to draw their own conclusions and to observe different phenomena on the basis of the same map (see Saareste 1939). The dialect atlas by Saareste really provided such quotation maps that included words or sentences. This feature was technically possible because of the smallness of the Estonian language area.

The study by Saareste *Põhja-Eesti ja Lõuna-Eesti murde vahepiir* ‘The boundary between North Estonian and South Estonian’ (Saareste 1952a) is important in linking dialect geography and language dynamics. In 1932, when working out his classification of the Estonian dialects, Saareste had over 500 dialect maps at his disposal; now his study was based on a considerably larger number of maps. Saareste’s *Petit Atlas des parlers estoniens* (Saareste 1955a), which included new dialect maps, has remained the largest atlas of the Estonian dialects. At the same time Saareste wrote a survey article about the

spread and nature of linguistic changes in Estonia (Saareste 1955b), where he again revealed the usefulness of dialect-geographical data for the interpretation of the spread of linguistic changes (see also Laanest 1992). In recent years Tiit-Rein Viitso has linked the methods of historical linguistics and dialect geography (Viitso 1996, 2000, see also Viitso in this book).

During the second half of the 20<sup>th</sup> century the spread of the dialect phenomena was analysed in a large number of studies by Estonian dialectologists, especially in lexical works. The geographical distribution of many phonetic and grammatical phenomena has been studied as well. For example, the unpublished study by Mihkel Toomse *Lõuna-Eesti murded 1–30* ‘South Estonian dialects I–XXX’ (1976–1984), which describes the South Estonian sound system on the basis of the historical consonant system, contains all in all 111 dialect maps that have been lately published separately as an atlas (Toomse 1998). These maps have been used for studying the classification of South Estonian dialects (Wiik 1999, Pajusalu 2000). In 1976–1986 the Estonian dialectologists Helmi Neetar and Vilja Oja took part in the compilation of *Atlas Linguarum Europea*. Since 1987 they, Arvo Laanest and Tiit-Rein Viitso have participated in the compilation of the atlas of the Finnic languages.

Synchronic classifications of the Estonian dialects that are based on explicit principles (see Pajusalu 1999a) began with the study by Saareste “About the dialect classification of Estonian” (Saareste 1932a). Saareste claimed that he had taken into consideration the more important phonetic and morphological features that distinguish the Estonian dialects, that is, isophones and isomorphs. Actually, also a large number of isolexes have been established. The accumulations of isoglosses of various kinds enabled Saareste to distinguish between four ranks of dialect boundaries, of which secondary, tertiary, and quaternary boundaries can be broken lines, see Map 3. In fact, the determination of complete dialect areas required certain generalizations.

Saareste did not explain in greater detail his basis for selecting language features. It seems that he took into account the more frequent and widespread speech forms, the variation of which are usually reflected in Standard Estonian.

The strength of the bundles of isoglosses provided by Saareste shows that from the synchronic point of view only the boundary between the North Estonian and South Estonian dialects can be regarded as a primary one. The belt of isoglosses between the north-eastern coastal dialect is secondary and is comparable to the belts of isoglosses between the insular dialect and the rest of North Estonian and the Mulgi dialect and the rest of South Estonian.

Saareste divides the North Estonian area at first into three: the North Estonian central area, the insular, and the north-eastern dialect area. South Estonian is at first divided into Mulgi and then into the rest of the South



**Map 3.** Some important belts of isoglosses  
(Saareste 1932b, map on p 23)

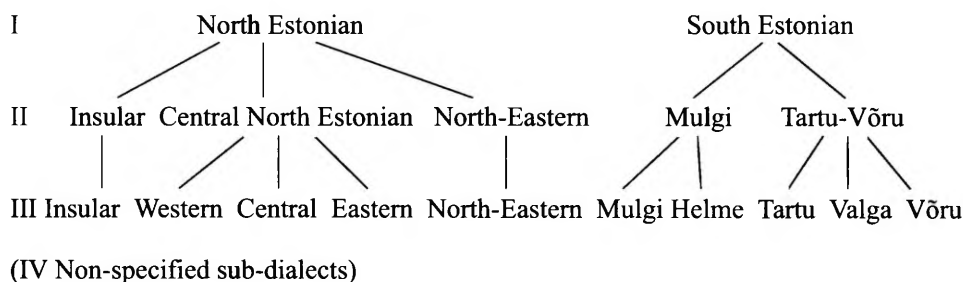
Estonian dialect area. This finding could be explained by the fact that the linguistic phenomena were largely selected from the point of view of the standard language; the division corresponds to some extent to the relative distance of the dialect areas from the standard language (cf. Pajusalu 1997).

On the third level the Central North Estonian area is subdivided into several parts. Saareste did not specify these dialect areas; he only referred to the corresponding counties. In this way the following dialects were singled out: the western dialect covers Läänemaa and Pärnumaa dialects, the central dialect covers Harjumaa and Järvamaa and the western and south-western parts of Virumaa, the dialect of northern Viljandimaa is located in the transitional area of Central Estonia, and the eastern dialect in northern Tartumaa and Iisaku. Thus, on the third level he subdivides the North Estonian area into six parts. At the same time, Saareste subdivides on the same level the South Estonian area into five parts, separating the Helme dialect from Mulgi and, in addition to the Tartu and Võru dialects, the small transitional areas of Tartu-Maarja and Kodavere Koosa from the Tartu–Võru area.

It is much more difficult to get an overview of the dialect division on the fourth level. Saareste did not provide a subdivision of the South Estonian area. In the North Estonian area the classification of the north-eastern dialect and the Harjumaa, Järva, and the insular dialects is clearer. The north-eastern dialect is subdivided into the western and eastern parts or the coastal and

north-eastern dialects. The Harju–Järva dialect is centrally subdivided into the western and eastern parts; in the insular dialect area one can single out the sub-dialects of Saaremaa, Kihnu, Muhu, and Hiiumaa. It is difficult, however, to distinguish between the western Pärnu, northern Viljandi, and northern Tartu dialects. In northern Viljandimaa a quaternary dialect boundary separates almost all the parishes. The same is true of Läänemaa–Pärnumaa and northern Tartumaa. It is somewhat easier to pin down the Vigala and Vändra sub-dialect areas in the west and the Kodavere sub-dialect in the east. The inadequate classification of the North Estonian dialects, especially in the southern transitional areas prompted Saareste to simplify his dialect classification in the subsequent studies.

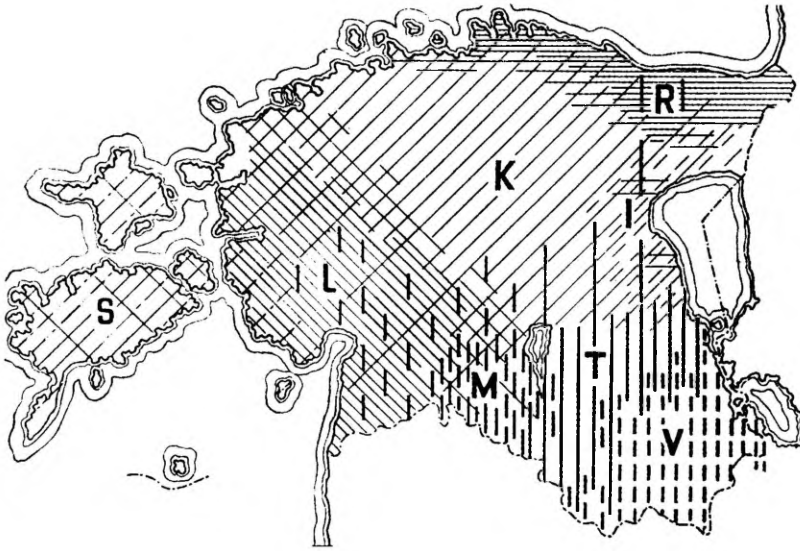
In a later popular dialect survey Saareste did not stress anymore the marginal dialect differences despite the fact that the lists of dialect features had become more complete since 1932 (Saareste 1952b: 95–113). Rather than providing the dialect boundaries on four levels, he provided lists of features that enable to group dialects on three levels, see Figure 1.



**Figure 1.** Classification of Estonian dialects according to Saareste (1952b)

At this the first two stages of classification are similar to Saareste 1932b. The third level, however, reveals important changes. The central North Estonian dialects were now represented on a new level of generalization. The transitional dialects of northern Viljandimaa are not singled out but belong to the central dialect. The internal specific features of the South Estonian dialect area were treated more superficially than the North Estonian features. Only the Tartu–Võru dialects were grouped in a new way so that the Karula and Hargla sub-dialects of western Võru and the border areas of western Rõuge were singled out as a separate group. Similarly to Mihkel Toomse (1998: 20), they could be regarded as constituting the Valga dialect.

The classification of the Estonian dialects according to Arnold Kask (1956: 24–40) is noteworthy for its consistent categorization. He classified the



**Map 4.** The Estonian dialect areas  
according to Arnold Kask (1956, Figure 1)

Estonian dialects on three levels: (1) main dialects or dialect groups, (2) dialects, and (3) sub-dialects. Sometimes he divided the sub-dialects further into smaller varieties. At this he abandoned the idea of marking the precise dialect boundaries, indicating some transitional areas with features of two or more dialects, see Map 4. The work by Kask remained the basis for further classifications of the Estonian dialects.

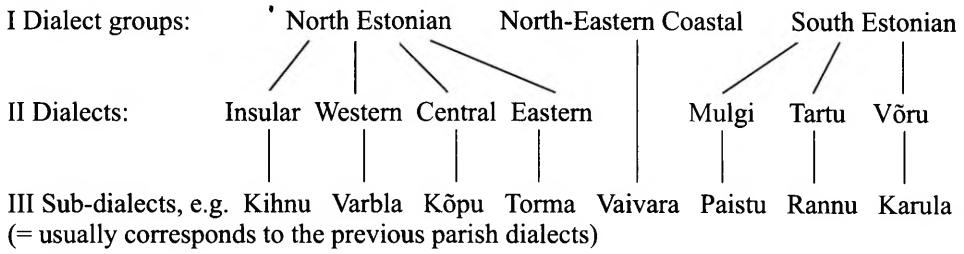
The classification by Kask introduced the north-eastern coastal dialect (Kask used the term *rannikumurre* 'coastal dialect') as the third dialect group in addition to North Estonian and South Estonian. Kask substantiates his view in his otherwise synchronic survey by the ancient special position of the coastal dialect, that is, by using diachronic arguments. At this, Kask provides a much smaller number of specific features for the coastal dialect than in the case of North Estonian and South Estonian. While singling out the north-eastern coastal dialect as a dialect group Kask does not subdivide it into dialects despite the fact that, for example, Kettunen (1917) had divided this dialect area into two – the coastal dialect and the north-eastern dialect. Saareste did the same on the third level of his four-level classification. As Kask put it, the Estonian language area consists of "three dialect groups, namely (1) the North Estonian coastal dialects, (2) the North Estonian dialects, and (3) the South Estonian dialects" (Kask 1956: 31).

Kask considers different local varieties as sub-dialects. For example, he calls as the sub-dialects of the north-eastern coastal dialect the dialect usage of two neighbouring parishes. Only the easternmost Vaivara represents alone

a single sub-dialect (later Vaivara is further subdivided, see Viitso 1996). According to Kask, the insular dialect includes the Hiiu sub-dialect, which in its turn contains a number of smaller varieties with different features. The other insular sub-dialects include Muhu, northern Saaremaa, central Saaremaa, southern Saaremaa (Sõrve), and finally Kihnu (Kask 1956: 32–33). The western dialect was subdivided first of all into the northern, central, and southern parts, the south-western part was subsequently separated from the central part, etc. Kask did not further subdivide the central and eastern dialects of North Estonian. Kask claimed that the western dialect of South Estonian or the Mulgi dialect is divided according to the parishes into five sub-dialects, which are further subdivided into the western Mulgi and the eastern Mulgi sub-dialects (Kask 1956: 37). Thus, it seems that there are groups of sub-dialects that remain between the sub-dialect and the dialect. The Tartu dialect was divided into five sub-dialects: Sangaste–Karula, Puhja–Rannu, Võnnu–Kambja, and Tartu–Maarja and Otepää that cover a single parish. He did not mention Rõngu and Nõo. The entire Võru dialect was divided into sub-dialects on the basis of parishes, with the exception of Hargla–Karula and Setu that are sub-dialects in their own right. Kask treats as Võru sub-dialects also the Leivu (Koiva), Lutsi, and Kraasna dialects of South Estonian spoken in the linguistic enclaves that are situated in North Latvia and Russia (Kask 1956: 38–40).

The greatest value of the dialect classification according to Kask lies in that the second level of grouping or the defining of the Estonian dialects is close to the optimum, which has remained the basis for the subsequent groupings. On the other hand, one should mention that some inconsistencies of the classification according to Kask found their way into the subsequent studies. It is especially true of the classification of the north-eastern coastal dialect and, in more general terms, the subdivision of dialects into smaller units.

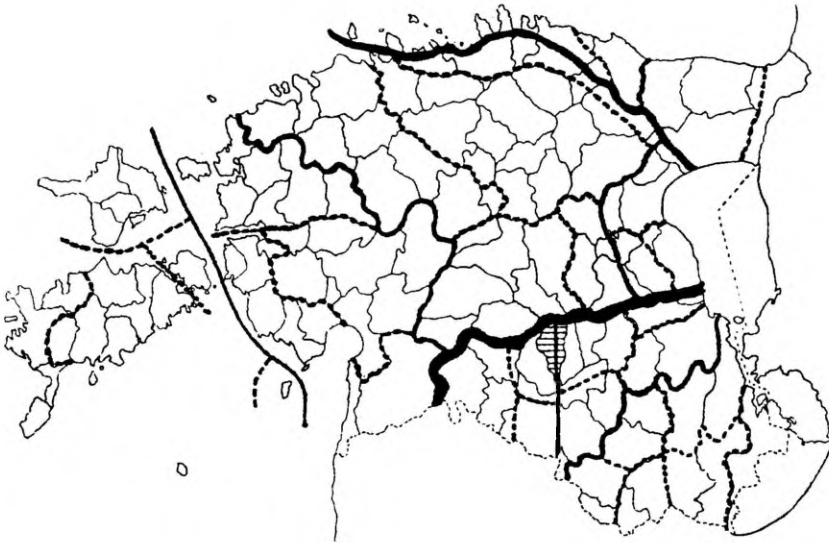
**The introduction to the dictionary of the Estonian dialects** (Pall 1994a) points out that the recent classification of the Estonian dialects (see Map 1), which encompassed all the dialects and corrected the previous classifications, was the one by Kask 1956. One cannot find any specific improvements of the dialect classification. On the other hand, Kask's views are developed rather freely as far as the internal classification of the dialects is concerned. The proposed grouping has clearly three levels. The dialect groups are divided into dialects, the latter are in their turn subdivided into sub-dialects. The number of the sub-dialects roughly equals the number of parishes. (See Figure 2.) This classification does not solve the moot points of the classification that Kask suggested in 1956. Only the level of the sub-dialect is more clearly formulated, but it was done at the cost of moving away from the principle of linguistic classification.



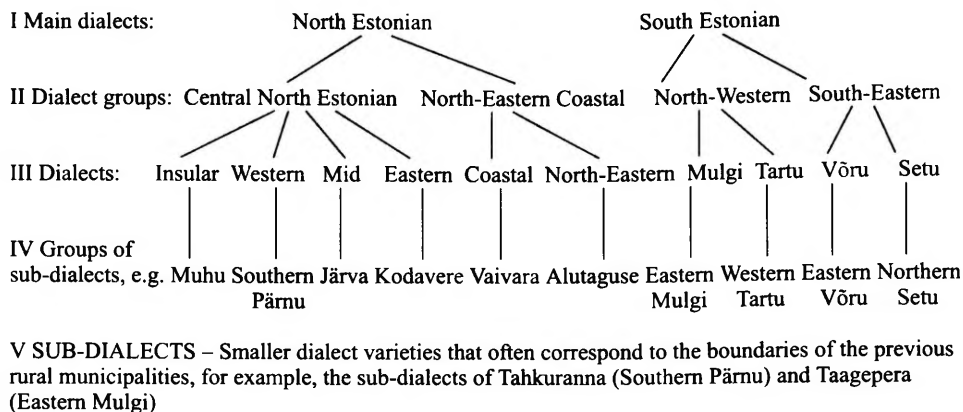
**Figure 2.** Dialect classification  
according to the Estonian dialect dictionary (EMS)

**Elaborated synchronic dialect classification.** Having analysed the previously discussed studies, Pajusalu 1999a suggested the latest division of the Estonian dialects, trying to solve the previously unsolved questions. The result of the study was illustrated by the relevant map, see Map 5.

Comparing all the important synchronic distinctions of the previously mentioned groups and taking into account the other studies that deal with the peculiarities of the Estonian dialects, I propose here a lightly modified five-level classification of dialects, see Figure 3.



**Map 5.** Estonian dialect boundaries  
according to Pajusalu (1999a, Map 1)



**Figure 3.** Elaborated synchronic classification of Estonian dialects

On the first level of classification we can find the **main dialects**. The problem whether there are two or three main dialects of Estonian is solved by distinguishing the levels of main dialects and dialect groups. The main dialects are the primary dialects of Estonian that differ from each other by the largest number of differences on all the language levels. There is no doubt that such main dialects of Estonian are North Estonian and South Estonian. The belt of isoglosses is clearly the widest on the border of North Estonian and South Estonian. Raun and Saareste presented 39 phonetic and 12 morphological differences between North Estonian and South Estonian (Raun, Saareste 1965: 85–90). There are also unusually many lexical differences. According to Eino Koponen (1998), 19,121 Estonian dialect words occur only in South Estonian. From the point of view of significance for Common Estonian, once again only North Estonian and South Estonian could be regarded as the main dialects. In this respect the north-eastern coastal dialect belongs to another level; rather, it is a part of the big North Estonian dialect area. Below you will find some distinctive features of North Estonian (NE) and South Estonian (SE) based on the frequency of occurrence.

In phonology, vowel harmony is restricted in NE, the various voiceless consonant clusters have survived (*ks*, *ps*, *tk*), with the exception of *\*kt* > *ht* (> *h*), for example, *kaks* ‘two’ : *kahe* (genitive), *laps* ‘child’, *lõpsa* ‘to milk (imperative)’; there are no affricates in NE. SE reveals extensive vowel harmony that affects also mid *e* and *o*. Instead of several voiceless consonant clusters there is a geminate or an affricate (*\*ks* > *ss*, *\*ps* (> *pts*) > *ts* (*c*), *\*kt* > *tt*), e.g. *katś* (*kacć*) : *kattõ*, *latś* (*laccć*), *nüssä*. In NE one can find (*\*m* >) *n* in the copula *on* ‘is’; in SE occurs *om*.

In inflection, the NE verb has a single conjugation, the third person present singular marker is *-b*, e.g. *küpseb* 'it is baking', *küpsetab* 'he bakes'. In SE the verb has two conjugations: the medial and the active. Accordingly, the third person present singular either has the marker *-s(se)* or it does not have any marker, e.g. *küdsäs*, *küdsä*. In NE the inessive ending of nouns is (*\*sna >*) *-s* and the abessive has *-tta*, e.g. *linnas* 'in town', *asjata* 'in vain'. In SE the inessive ending is *(-h)n* or *-h*, and the abessive ends in *-lda*, e.g. *liinan*, *aśalda*. In NE the negational word precedes the verb form, e.g. *ei olnud* 'was not'; in SE it often follows it, e.g. *olõ-õss*.

The core vocabulary reveals extensive differences as well, for example, NE *pesema* 'to wash', *oder* 'barley', *pärn* 'lime tree', *laupäev* 'Saturday' and SE *mõskma*, *kesv*, *pähn*, *puul'päiv*.

On the following level of dialect classification we can single out four **dialect groups** by separating the north-eastern coastal dialects from the rest of North Estonian and north-western South Estonian dialects from the south-eastern South Estonian dialects.

In the case of North Estonian it is clear that the north-eastern coastal dialect group does not reveal considerably more specific features than the insular dialect. Raun and Saareste provided 24 phonetic and 9 morphological distinctive features for the north-eastern coastal dialects and 20 phonetic and 4 morphological distinctive features for the insular dialect (Raun, Saareste 1965: 90–96). However, as the specific features of the north-eastern coastal dialects affect the deeper layers of the linguistic structure, it is impossible to refute the argumentation provided in Kask 1956 and the definition of the north-eastern coastal dialects as a dialect group is valid. On the other hand, Viitso pointed out that the coastal and north-eastern dialects do not reveal common innovations (Viitso 1985: 404) but the historical background of the features shared by these dialects is a problem of diachronic rather than synchronic classification. The findings of Saareste show well enough a strong belt of synchronic isoglosses that, on the one hand, unite, and, on the other hand, separate both dialect areas, see Map 3.

The most important prosodic features that distinguish the rest of North Estonian and the north-eastern coastal dialects (NEC) include three distinctive degrees of quantity in NE versus two in NEC, absence of palatalization and unweakened single stops in NEC, cf. NE *tād'i* 'aunt', NEC *tāti*; non-apocopic and non-syncopic forms in NEC, cf. NE *soomlane* 'Finn', *merest* 'from the sea', NEC *suomelane*, *meresta*.

There are also numerous differences in inflectional morphology. For example, NEC is characterized by the strong-grade terminative, cf. NEC *randani* 'as far as the coast' and NE *rannani*; the infinitive marker is analogically added to the *a-* and *e-*stem verbs, e.g. NEC *andada* 'to give', *laskeda* 'to

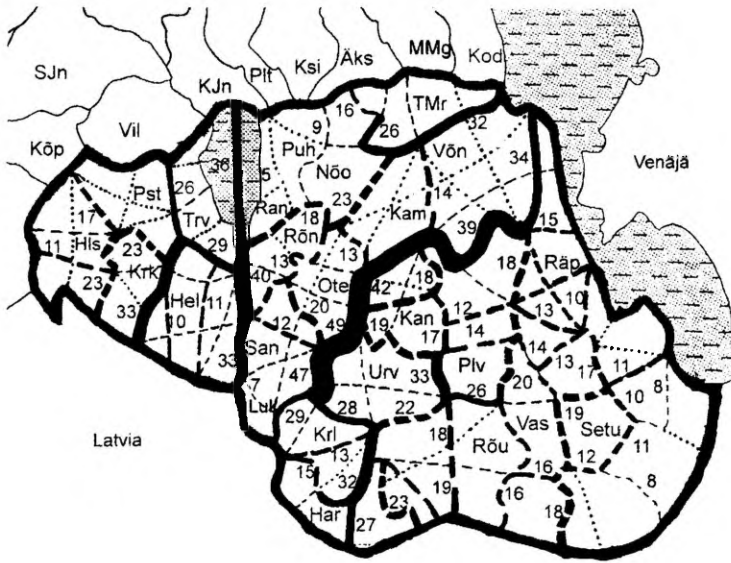
shoot' versus NE *anda*, *lasta*; the formation of the double plural, cf. NEC *kanudel* 'hen (adessive plural)', *varsidest* 'stem (elative plural)', NE *kanadel*, *vartest*, and diphthongized partitive plural as in NEC *kalaid* 'fish (partitive plural)', *linduid* 'bird (partitive plural)', NE *kalasi(d)*, *lindusi(d)*.

It is an ambiguity to call the dialect group that remains after separating the north-eastern coastal dialects as North Estonian. In the older dialectological literature the North Estonian dialects have always included the north-eastern coastal dialects. From Kask (1956) onwards the North Estonian dialects came to be understood in a narrower sense as a dialect group that does not include the north-eastern coastal dialect despite the fact that it is the northernmost group of the Estonian dialects. Thus, when reading the Estonian dialectological literature one has to make clear at first what is meant by the term North Estonian. Central North Estonian is the more precise term for the narrower meaning of North Estonian, which would point to the central role of this group for the variety that served as the basis for contemporary Estonian.

The South Estonian dialect area poses first of all the problem of primary classification. Saareste (1932a) placed the belt of isoglosses, which is secondary for the entire Estonian dialect area, between Mulgi and Tartu–Võru, see Figure 1. However, in the light of recent data Saareste's classification is inaccurate. A study that took into account the occurrence of 115 phonetic and morphological features and 12 pronouns indicated that in South Estonia the primary oppositions can be found between the north-western (Mulgi–Tartu) and the south-eastern (Võru–Setu) dialect groups (Pajusalu 1999b). The primary South Estonian dialect boundary is clearly located between the Tartu and Võru dialects, see Map 6.

The differences between the north-western and south-eastern dialects of South Estonian are manifested on all levels of the language. Thus, the north-western pronunciation is characterized by epenthetic palatalization, e.g. (*ütsi* >) *üits* 'one', (*lätsi* >) *läits* 'went'; the south-eastern pronunciation, on the other hand, is characterized by the Russian-like palatalization, for example, *üts* (= *ütsj*), *läts* (= *lätsj*). Mulgi–Tartu has lost the word-initial *h* and the mid-high vowels are not raised before the nasals, e.g. *enda* 'self', *ommuk* 'morning'; in Võru–Setu *h* has been retained and the mid vowels are raised before the nasals, e.g. *hindä*, *hummuk*. While in Mulgi–Tartu the laryngeal stop is mostly lost and there is no high illabial mid vowel, e.g. *võõra* 'strangers', *õnnista* 'bless', Võru–Setu is characterized by the word-final laryngeal stop (marked here as *q*) and the high illabial mid vowel (marked here as *y*), as in *vyraq* and *ynnistaq*.

There are also numerous differences in inflection and syntax. For example, while in Mulgi–Tartu the *vat-*, *vet-*marked oblique mood and the *n*-marked inessive are most common, e.g. *olevat* 'is said to be', *külän* 'in the



**Map 6.** Belts of isoglosses in South Estonia  
according to Pajusalu (1999b, Map 4)

village', Võru–Setu are characterized by the *v*-marked oblique mood and the *h*(*n*)-inessive, e.g. *ollõv* 'is said to be', *küläh* 'in the village'. In Mulgi–Tartu the negational form usually precedes the verb, e.g. *ei jole* 'isn't', in Võru–Setu, however, it follows the verb, e.g. *olõ-õi*.

On the third level of classification the traditional Estonian **dialects** are defined. Arnold Kask (1956) showed that the dialects in the North and South Estonian groups are well grounded from the linguistic perspective. In most cases there is no good reason to re-group them on the same level. It is yet doubtful whether Setu in South Estonia should be regarded as a sub-dialect of Võru, see the discussion below. The north-eastern coastal dialect could be subdivided into the coastal and the north-eastern dialects. Within the dialects one can observe first of all groups of sub-dialects as usages of wider regions. The sub-dialects would then be defined as smaller local varieties that are distinguished from the dialect usage of one's neighbours by features that are identified by the speakers themselves.

**The coastal and the north-eastern dialects** of the north-eastern coastal dialect group were treated as two dialects already in the classifications that originated at the beginning of the 20<sup>th</sup> century (e.g. Kettunen 1917). The border between these dialects is visible also on the maps of isoglosses by Saareste (1932a; see Map 3). Tiit-Rein Viitso has most clearly brought out the differences between these two dialects (Viitso 1996: 394–396), starting with a highly characteristic and frequent phonological difference. In the coastal dialect there is no illabial central vowel *õ*; in the north-eastern dialect, how-

ever, it is especially frequent, including those words where one can find *o* in Standard Estonian, e.g. *õli* 'was' for *oli*, *kõht* 'place' for *koht*, *õtse* 'straight' for *otse*. The difference between the coastal and the north-eastern dialects is comparable to the difference between the North Estonian insular and western dialects or the South Estonian Mulgi and Tartu dialects.

In addition to the difference in the occurrence of *õ*, there are other major phonological features that distinguish these dialects, cf. Table 1. Although neither dialect makes a difference between the long and overlong degrees of duration, the gradation of geminated stops is different. The coastal dialect is similar to Finnish in that a weak-grade single stop alternates with a strong-grade geminate, cf. *sepä* 'smith (genitive)' : *seppä* (partitive). In the north-eastern dialect the geminated stop has become generalized into the strong grade, e.g. *seppä* : *seppä*. There are also some morphological differences. For example, in the coastal dialect the third person singular forms of the present tense are unmarked, as *näke* 'he sees', *viska* 'he throws'. By contrast, in the north-eastern dialect they are marked by *-b*, cf. *näeb* 'he sees', *viskab* 'he throws'. In the coastal dialect the conditional mood is marked by *-isi* or *-ksi*, e.g. *veisin*, *veiksin* 'I would take'. In the north-eastern dialect it is typical to find *-s(i)* or *-(i)ses(i)*, e.g. *tegesin*, *tegesesin* 'I would make'. As for vocabulary, the coastal dialect shares more words with Finnish, and the north-eastern dialect is similar to Votic.

**Table 1.** Occurrence of some phonological features in Estonian dialects

Feature	Northern Coastal	Northern Eastern	Insular	Western	Mid	Eastern	Mulgi	Tartu	Võru	Setu
Q3	–	–	+	+	+	+	+	+	+	+
mid <i>õ</i>	–	+	*	+	+	+	+	+	+	+
high <i>y</i>	–	–	–	–	–	–	*	*	+	+
<i>ä</i> -harmony	+	+	*	*	*	+	+	+	+	+
<i>ü</i> -harmony	+	*	*	–	–	*	*	*	+	+
<i>õ</i> -harmony	*	–	–	–	–	–	–	–	*	*
<i>õ</i> -harmony	–	–	*	–	–	–	–	*	+	+
word-init. <i>h</i>	*	–	*	–	–	–	–	–	+	+
VV <i>h</i>	*	–	–	–	–	–	–	–	*	+
word-final <i>h</i>	–	–	–	–	–	–	–	–	*	+
word-in.CC	*	+	–	–	*	+	–	*	*	+
affricates	–	–	–	–	–	–	*	*	+	+
voiced stops	–	–	–	–	–	–	–	–	*	+
syncope	*	*	+	+	+	+	+	+	+	+
apocope	*	*	+	+	+	+	+	+	+	+

**Key:** + occurrence of the feature; – lack of the feature; \* limited occurrence of the feature

The coastal dialect is subdivided into three groups of sub-dialects. All of them have their own characteristic features. In the western group of the coastal dialect (Jõelähtme, Kuusalu, the western coast of Haljala) the first person plural of the indicative is marked by *-(m)me*, the second person plural is marked by *-tte*, and the second person plural of the imperative is marked by *-(k)ke*, e.g. *jäämmme* 'we stay', *jäätte* 'you stay', *jääke* 'stay'. In the central group (eastern Haljala and the coast of Viru-Nigula) one can find respectively *-(m)ma ~ -(m)mä*, *-tta ~ -ttä* and *-(k)ka ~ -(k)kä*: *jäämmä*, *jäättä*, *jääkä*, and the same forms in the eastern group (the coastal and eastern dialects of Vaivara) would be *-(m)mo ~ -(m)mö*, *-tto ~ -ttö*, and *-(k)ka ~ -(k)kä*, as *jäämö*, *jäättö*, *jääkä*. The north-eastern dialect does not reveal clear subdivisions. However, individual features make it possible to distinguish the archaic Lügánuse usage from that of Jõhvi–Iisaku–Western Vaivara (Must 1995).

In the Central North Estonian dialect group the primary division occurs between the eastern dialect and the rest. **The eastern dialect** with its core area of Kodavere parish on the western shore of Lake Peipsi and its western and northern neighbouring areas (south-western Iisaku, Torma parish, eastern Laiuse and Palamuse, Maarja-Magdaleena parish, see Pall 1994a) has witnessed a strong assimilating influence of the central dialect during the past centuries. According to the earlier studies, the border of the eastern dialect was farther to the west. Not long ago Univere (1988, 1996: 11–15) thought that the entire Äksi parish belonged to the eastern dialect. Thanks to the important studies by Lauri Kettunen (1913, 1913–1914) we have a rather good picture of the archaic Kodavere dialect.

The eastern dialect is in several respects close to the north-eastern dialect and the Votic language, e.g. the central illabial *õ* is common, *st* is replaced by *ss*: *issun* for *istun* 'I sit' of Standard Estonian (StE), *mussad* for StE *mustad* 'black ones', *vedess* for StE *veest* 'from water'; *vv* occurs in place of *u* in such words as *õvv* for StE *õu* 'yard'. The eastern dialect shares also some features with South Estonian, for example, the *n*-marked inessive *ilman* for StE *ilmas* 'in air'; the *nu*-marked past participles: *kasunu* for StE *kasvanud* 'grown', *ollu* for StE *olnud* 'been'; the past form of the negational verb *ess õle* for StE *ei olnud* 'was not'.

The eastern dialect is similar both to the north-eastern dialect and Setu in that the translative is marked by *-st*, e.g. *suurest mehest* for StE *suureks meheks* 'into a big man'. The conjugation of the negational verb in the eastern dialect is unique for the entire Finnic language area, e.g. *esin õle* for StE *ma ei olnud* 'I wasn't', *esid õle* for StE *sa ei olnud* 'you weren't', *es õle* for StE *ta ei olnud* 'he wasn't', *esimä olõ* for StE *me ei olnud* 'we weren't', *esittä õle* for StE *te ei olnud* 'you weren't', *esid õle* for StE *nad ei olnud* 'they weren't'. The eastern dialect reveals several other typical phonological and morphono-

logical features, such as the generalization of the strong-grade dental stop into the weak grade of gradational words, e.g. *madud* for StE *maod* 'snakes', *sidub* for StE *seob* 'binds'; the occurrence of *st* in place of *ht* at the end of a stressed syllable, e.g. *pusta* for StE *puhta* 'clean (genitive)', *õsta* for StE *õhtu* 'evening'. Nevertheless, the eastern dialect clearly belongs to the North Estonian dialect group. It reveals the vast majority of the phonetic and grammatical peculiarities of Estonian, such as the ternary opposition of three degrees of quantity, largely the same nominal and verbal categories, etc. On the western border there is a smooth transition to the central dialect. The eastern dialect shares a number of innovations with the latter, e.g. (*aa* >) *oa*, *ua*: *koa* 'also', *suab* 'receives'; (*ää* >) *ea*, *ia*: *heal* 'voice', *riagib* 'speaks'; the use of /a/ as the partitive plural marker: *kiva* 'stone (partitive plural)', *poissa* 'boy (partitive plural)'

Despite its smallness the eastern dialect has been subdivided into several groups of sub-dialects. As a maximum four dialect usages have been distinguished: the core dialect (the main area of Kodavere parish and northern Maarja-Magdaleena), the usage of the northern part of the eastern dialect (the sub-dialects of Iisaku, Tudulinna, and Avinurme, the northern part of Torma parish and the north-eastern corner of Laiuse), the western group (Torma, with the exception of its northern part, Laiuse, Palamuse, and the eastern dialect of central Maarja-Magdaleena) and the southern part (Äksi and southern Maarja-Magdaleena) (cf. Univere 1996: 11–15). In more general terms the eastern dialect could be subdivided into the core group that contains the largest number of the features that are specific to the eastern dialect, the northern group that shares more features with the north-eastern dialect, and the western group (including the dialect of the southern part) that is a transitional area to the central dialect.

**The central dialect** is essentially different from the other Estonian dialects. It is spoken in an broad dialect area that covers a third of the Estonian territory. From the linguistic point of view it is not as uniform as the other dialect areas. It seems that it is an extensive transitional area between different dialect centres, which became the basis for Standard Estonian. The dialectometric studies also show that the stereotypy centre of the dialect vocabulary of Estonian coincide with the centres of the central dialect (see Krikmann, Pajusalu 2000). Nevertheless, the central dialect has its own characteristic features as well, which are most common in the core area that is formed by the northern sub-dialects of Järvamaa (Ambla, Järva-Madise, Järva-Jaani, Koeru, Peetri), the usage of the historical north-western Virumaa (Väike-Maarja, Simuna; Kadrina and southern Rakvere, south-western Viru-Jaagupi), and the usage of north-eastern Harjumaa (Jüri, Harju-Jaani, Kose). This group of sub-dialects reveals the greatest overlap with the other parts of the central

dialect. The phonetic and morphological features that are regarded as part of the genuine central dialect are manifested here, for example, frequent diphthongization of long vowels *pea* for *pää* 'head', *põesas* for *põõsas* 'bush', *nüid* for *nüüd* 'now'; lengthening of the stop before *s* in syncopical words: *antsid* for *andsid* 'you gave', *jalksi* for *jalgsi* 'on foot', *kärpsed* for *kärbsed* 'flies'; pluralization by means of the generalized *de*-marker: *jalgadel* for *jalul* 'on feet', *külades* for *külis* 'in villages'; the diphthongized partitive plural in trisyllabic words: *aastaid* for *aastid* 'year (partitive plural)', *tüdrukuid* for *tüdrukid* 'girl (partitive plural)'. There is a considerable overlap between the vocabulary of the central dialect and the core vocabulary of contemporary Estonian.

The internal classification of the central dialect is complicated and probably needs an intermediate stage in comparison with the other Estonian dialects (see Pajusalu 1999a: 87–88, Must, Univere 2002). Traditionally the sub-dialects of the peripheral areas of the central dialect have been subdivided according to parishes. In that case one would speak about the sub-dialects of the central dialect of Harjumaa, Virumaa, northern Viljandimaa, and northern Tartumaa, which do not belong to the core area. These north-western sub-dialects of Harjumaa form a transitional area from the central dialect to the western dialect. The sub-dialects of Virumaa form a transitional area from the coastal dialect to the north-eastern dialect, those of northern Viljandimaa to the western and the Mulgi dialect, the sub-dialects of northern Tartumaa to the eastern dialect and the Tartu dialect. These groups of sub-dialects manifest several common features with the neighbouring dialects. At the same time, it is noteworthy that a large part of the phonetic and morphological innovations that are known in the central dialect may have come into existence on the border of the central dialect and other dialects, especially on the border with the north-eastern coastal dialects. Also, as for the lexical relationships the core area of the central dialect is attached to the rest of Virumaa in the north-east; even the sub-dialects of southern Järvamaa are united with the larger north-eastern linguistic area, see Krikmann, Pajusalu 2000 and Map 7.

Põltsamaa and Kursi are lexically attached first and foremost to the eastern dialect. However, the large eastern group in its turn is united with the north-eastern area in the north. The north-western sub-dialects of the central dialect, starting with Keila, Hageri, and Juuru are drawn towards the western dialect. In the south Kõpu, Suure-Jaani, Viljandi, and Kolga-Jaani are attached to south-western Estonia with the Mulgi dialect of South Estonian as the centre. Türi and Pilistvere form the watershed area, which unites the north-western and north-eastern centres. The lexical relationships of the central dialect show that, similarly to the Estonian cultural area, also the Estonian



**Map 7.** Lexical relationships in the Estonian dialects  
(Krikmann, Pajusalu 2000, Figure 9)

linguistic area can be subdivided into three parts: West Estonia, North-Eastern Estonia, and South Estonia. The central dialect serves as the connecting link between these large areas, primarily between West Estonia and North-Eastern Estonia.

**The western dialect** is spoken in Läänemaa and Pärnumaa in the western and south-western parts of continental Estonia. The western dialect is in many ways similar to the central dialect. The transition from the central dialect to the western dialect is gradual; some western features reach far into Central Estonia, for example, the strong-grade inessive: *randas* for StE *rannas* ‘on the coast’, *jalgas* for StE *jalas* lit. ‘in one’s foot’; the *a*-stem comparative: *aram* for StE *arem* ‘more timid’, *kõvam* for StE *kõvem* ‘stronger’; haplological verb forms: *kirjutakse* for StE *kirjutatakse* ‘is written’, *õpetud* for StE *õpetatud* ‘taught’. In the western and also the insular dialect there is more reduction in the pronunciation of unstressed syllables than in the central dialect, which has brought about many instances of reduction and loss of sounds in non-initial syllables, e.g. *pisiksed* for StE *pisikesed* ‘tiny (nominative plural)’, *saarlest* for StE *saarlased* ‘islanders’. Some other typical phonetic features of the western dialect include *b* replacing *v* between the vowels: *kõba kibi* for StE *kõva kivi* ‘hard stone’; absence of *v* next to the labial vowels *u, ü, ö*: *sui* for StE *suvi* ‘summer’, *karu* for StE *karv* ‘a hair’; the

word-initial consonant cluster is not pronounced: *leit* for StE *kleit* 'dress', *rahv* for StE *trahv* 'fine'

Some western features, including the previously mentioned ones, affect also the insular dialect and reach the westernmost Mulgi dialect of South Estonian, which points to the south-western dialect alliance. At the same time the western dialect area is internally rather uneven. The dialect boundaries are of varying strength, see Map 3. One can demarcate some broader groups of sub-dialects and distinguish narrower dialect usages within them (see also Juhkam, Sepp 2000). There is a tradition to single out five dialect usages: (1) the western dialect of the Coastal Swedish area (Noarootsi, Vormsi) that has been heavily influenced by Estonian Swedish; (2) the dialect usage of the northern group in the northern part of Läänemaa (Lääne-Nigula, Ridala, Martna, Kirbla, Kullamaa, Märjamaa), which is close to the Harjumaa sub-dialects of the central dialect; (3) the central group representing the most characteristic western dialect (Vigala, Pärnu-Jaagupi, Pärnu, Vändra, Tori, Audru); (4) the south-eastern group that is close to the insular dialect (Hanila, Lihula, Varbla, Mihkli, Tõstamaa), and (5) the southern group in southern Pärnumaa (Häädemeeste, Saarde), which manifests Mulgi influences (cf. Kask 1984: 16–17). The latter group manifests some possible Livonian influences as well, both in the sound system, for example, in non-initial syllables where *a* occurs in place of the expected *e*: *mera* for StE *mere* 'sea (genitive)', and in grammar, for example, the oblique mood resembling the *ja*-, *je*-marked agent noun: *tuleje* 'is said to come', *tahtja* 'is said to wish'

**The insular dialect**, which is spoken on the West Estonian islands from Kihnu to Hiiumaa, is rather close to the western dialect but it reveals more Swedish influences. Speakers of Swedish used to live for centuries on the coasts of north-western Estonia and on various West Estonian islands. The islanders' speech reveals the Swedish-like singing intonation that is caused by a later rise of the fundamental frequency. It brought about the strengthening of the centralizing word stress in the initial syllable that in turn gave rise to prolonged and heightened vowels, for example, *loulma* for StE *laulma* 'to sing', *soun* for StE *saun* 'sauna', *pee* for *pää* 'head' (StE *pea*) and reduced tenseness in the articulation of non-initial syllables.

The Saaremaa dialect is characterized by the labialization of the central *õ*, as in *kõva* for StE *kõva*, *õlu* for StE *õlu* (this feature does not occur in eastern Saaremaa and on the islands of Muhu and Kihnu). The insular dialect is the only Estonian dialect where proverbs are used in responses. The insular dialect reveals also a number of features that can be explained not by foreign influences but the peripheral position, e.g. the retention of diphthongs in the syllables carrying a secondary stress: *lapsugeine* for StE *lapsukene* 'little child'; prohibition ending in *-g*: *tulg mette* 'don't come', *ää tehk* 'don't

do (it)'. In the North Estonian dialect group one can find the word-initial *h* only in the pronunciation of speakers who inhabit the coasts of Hiiumaa and western Saaremaa.

The insular dialect is subdivided into the usages of different islands, in Saaremaa also into the varieties of various parts of the island (Lonn, Niit 2002). The language of Hiiumaa shares some common features with the coastal dialect and Finnish, e.g. the absence of palatalization in consonants and the impersonal present forms without the marker *-kse*, cf. *tooda* and StE *tuuakse* 'is brought', *kutsuda* and StE *kutsutakse* 'is called'. The analytical forms are used instead of the *ga*-marked comitative, which is known in most Estonian dialects and the standard language, e.g. *isa kaasa* for StE *isaga* 'with father'. There are many Estonian Swedish loanwords, such as *trasu* ~ *träsu* 'rag', *krenkima* ~ *kränkima* 'to be ill'. Some of them coincide with south-western Finnish dialects (Sedrik 1997).

The dialect usage of Muhu can be regarded as a transitional dialect between the islands and continental Estonia. It does not reveal some characteristic features of the islands. On the other hand, it shares some common innovations even with the central dialect, such as the diphthongization of low vowels, e.g. *koa* for StE *ka* 'also', *mua* for StE *maa* 'land'. The sub-dialects of eastern Saaremaa (Pöide, Jaani) are close to Muhu.

The usage of central Saaremaa (Karja, Valjala, Püha, Kaarma, Kärla) represents the most typical insular dialect. It reveals the maximum number of the specific features of the insular dialect. The dialects of western Saaremaa (Jämaja, Anseküla, Kihelkonna, Mustjala) stand out by their so-called Swedish-like pronunciation and, on the other hand, by several archaic features.

The usage of Kihnu is the most peculiar insular dialect. Some of its peculiarities are unknown elsewhere in Estonian dialect area, for example, in the first syllable (*i, e* >) *jõ* and (*ä* >) *ja*: *jõrm* for StE *hirm* 'fear', *njapp* for StE *näpp* 'finger'; the diphthong *eü*: *leül* for StE *leil* 'steam', *keüs* for StE *köis* 'rope'. Kihnu is the only dialect in the North Estonian dialect group that has the *õ*-harmony: *olõ* for StE *ole* 'be', *tugõv* for StE *tugev* 'strong'. As for the vocabulary, the western Tõstamaa dialect is the closest to Kihnu.

Among the South Estonian dialects **Mulgi** is the most similar to the western North Estonian dialects. The most characteristic phonetic feature of Mulgi is the change of *a* and *ä* into *e* starting with the third syllable, e.g. *armasteme* for StE *armastama* 'to love'. One should also mention the late cases of apocope that have given rise to homonymous forms, e.g. *juttustem* for StE *jutus-tama* 'to retell', *latsel* for StE *lapsele* 'child (allative)' (see also Tanning 1961, Pajusalu 1996: 36–92). Also, there are peculiar infinitive prohibitive forms: *ärä minnä* 'don't go', *ärä tettä* 'don't do (it)'. The verb inflection and morphosyntax in Mulgi have been innovative, and several new verb forma-

tion patterns have been introduced, for example, the synthetic past conditional: *olluss* '(if) had been' and some new morphosyntactic categories with their own markers, such as the *den*-marked past jussive, e.g. *tulden* 'should have come', *ärden tulla* 'should not have come', and the *kkest*-marked diminutive optative, as in *meekkest* 'please go', *tulekkest* 'please come' (see Pajusalu 1996). The vocabulary of Mulgi shares some features with Livonian, e.g. *kainus* 'rather', *koldas* 'shore', *kurtma* 'to stand', *uisk* 'worm' (Tanning 1958). There are also many Latvian loanwords, e.g. *ak's* 'lively, mischievous', *puuts* 'owl', *tor't* 'stork', etc. (Vaba 1997).

Within the Mulgi dialect area Helme is different from the rest, see Map 3 and 5. Helme differs from the rest of Mulgi in that it has more common South Estonian features. Of the Mulgi sub-dialects, only Helme has the *ai*-diphthongs instead of *ei*, which is characteristic of South Estonian, e.g. *sain* for StE *sein* 'wall', *saiba* for StE *teiba* 'of rod'. It has also geminated partitive forms of disyllabic nouns: *sõnnu* for StE *sõnu* 'word (partitive plural)', *vannu* for StE *vanu* 'old (partitive plural)'. The South Estonian demonstrative pronoun *too* 'that' is used in addition to *see* 'this' in Helme. The Mulgi area could be further subdivided into western Mulgi (Halliste, Karksi, western Paistu) and eastern Mulgi (eastern Paistu, Tarvastu, northern Helme). Western Mulgi shares more features with the western dialect; eastern Mulgi is closer to the Tartu dialect.

**The Tartu dialect**, which used to serve as the basis for the historical Tartu written language, is rather close to Mulgi, especially Tarvastu and Helme. More specific features are manifested in morphology. In the Tartu dialect the illative is marked by *-de*; in Mulgi it is marked by *s(se)*, cf. Tartu *kambrede* 'into the room' and Mulgi *kamres* (see Keem 1970). The Tartu dialect is characterized by the formation of several synthetic past forms. Thus, personal endings are attached to the plural past participle: *olluva* 'they have been', *nännümi* 'we have seen'; plural personal endings can be attached in the negative as well: *ei annava* 'they don't give'. The sub-dialect groups of the Tartu dialect reveal several differences. The Tartu dialect area is usually subdivided into four groups of sub-dialects: (1) the western group (Rannu, Puhja, Nõo), which is especially close to Mulgi; (2) the southern group (Rõngu, Otepää, Sangaste), which shows a number of similarities to the neighbouring western Võru sub-dialects in the east; (3) the eastern group (Kambja, Võnnu), which resembles north-eastern Võru, and (4) the north-eastern group (Kodavere, Kavastu, Tartu-Maarja), which is a transitional area to the North Estonian dialect area (Keem 1970, Pajusalu 2000).

The most different group of Tartu sub-dialects is the north-eastern group, where many phonetic and morphological features are similar to the usage of the eastern dialect of North Estonian. According to Saareste 1932a, the stron-

gest belt of isoglosses emerged between this area and the rest of the Tartu dialect, see Map 3. The western group reveals various specific developments in addition to Mulgi features. For instance, *na*-marked forms are common in the oblique mood of the present tense: *võtna* 'is said to take', *kirjutana* 'is said to write'. As the more widespread *nu*-marked forms are used in the past oblique mood: *võtnu* 'is said to have taken', *kirjutanu* 'is said to have written', this usage reveals a paradigm of the oblique mood that is unique for the entire Estonian linguistic area for its compactness of form in different tenses (see Metslang, Pajusalu 2002).

The southern sub-dialect group of Tartu is the internally least uniform group. It has a weak border with western Võru, see Map 6. There are many differences also within parishes. Yet the usage of Otepää parish, which belongs to this group, has been considered to be the most typical Tartu dialect (Keem 1970). The sub-dialects of the eastern group are rather conservative. They reveal archaic forms similarly to the neighbouring Võru dialect. For example, the use of the personal passive has been observed in Kambja; Võnnu is the only Tartu sub-dialect where one can find the *he*-illative similarly to Võru, e.g. *kerkkoh* 'into church', *Petserihe* 'into Petseri'

**The Võru and Setu dialects** have retained the largest number of old South Estonian features. In addition to the historical Võrumaa and Petserimaa, these dialects were also spoken in the Leivu and Lutsi linguistic enclaves on North Latvia and in the Kraasna linguistic enclave south of Pskov in Russia. These dialects reveal extensive and consistent vowel harmony, where only *i* and *o* are neutral vowels, see Table 1. In addition to the harmony of *ä*, *ü*, and *õ*, Rāpina and northern Setu reveal on a limited scale also the *ö*-harmony: *herösk* 'ragbag', *jänö* 'bunny'. Unlike the other Estonian dialects, eastern Võru and Setu are characterized by *h* in all positions, including the inessive ending, e.g. *hõbõhhõh* 'in silver' and the original word-final position, e.g. *imeh* 'miracle'. The word-final laryngeal stop is also highly characteristic in a number of grammatical forms, such as the marker of the nominative plural and the second person imperative singular: *tarõq* 'rooms', *annaq* 'give'. Almost all the consonants can be palatalized, and palatalization has a morphological function, for example, as the third person marker of the simple past, cf. *and* 'he gives' and *and'* 'he gave'. In the plural oblique cases one can find the marker *-i*: *hüdsile* 'on the coals', *tarrih* 'in rooms'. At the same time, late apocope and syncope are rather common in Setu, which has given rise to inflected paradigms with complicated quantity alternations, such as *lağa* 'wide' *laja* (genitive) : Q2 *lakk'a* (partitive) Q3 *lakk'a* (illative) (see Keem 1997). In addition, the vocabulary reveals many peculiar features (see Koponen 1998).

The relationship between Võru and Setu is the primary concern in grouping the south-eastern South Estonian dialects. Many researchers have treated

Setu as a separate South Estonian dialect. However, since Saareste Estonian dialectologists have regarded Setu as a sub-dialect of Võru. According to the studies that take into account the number of specific features (Wiik 1999, Pajusalu 1999b, 2000), the boundary between the Setu and the eastern Võru sub-dialects is weaker than between the Tartu and Võru dialects or between the Mulgi and Tartu dialects. It is even weaker than between western Võru and central Võru, see Map 6. Yet the Lutheran Võru people and the Orthodox Setu people are very much aware of their linguistic differences, probably because they have also different cultures and identities. A Võru person claims to recognize a Setu person by a single sentence and the other way round.

The differences between Võru (V) and Setu (S) are first and foremost related to pronunciation and vocabulary. Setu reveals voiced stops and sibilants, syllable harmony; *l* and *h* are strongly pronounced as in Russian. Many frequent words have a different phonetic shape, e.g. Võru *hää*, Setu *hüä* 'good'; Võru *häste*, Setu *höste* 'well'; Võru *egä*, Setu *ōga* 'any' There are only a few morphological differences, for example, the translative ending is *-ss* in Võru but *-st* in Setu, cf. Võru *jaoss* 'for', Setu *jaost*. The vocabulary of Setu has many Russian loanwords: *hott* 'although', *huutor* 'single farm', *paaba* 'woman', *tsuuda* 'miracle' (see Must 2000).

Another question that is related to the classification of south-eastern South Estonian dialects is the so-called Valga dialect. Proceeding from the previous administrative division into counties, some linguists of the early 20<sup>th</sup> century separated the western part of the Võru dialect area into the Valga dialect (see e.g. Toomse 1998). Also, when Kask (1956) presented Hargla-Karula as a 'great sub-dialect', he took this fact into consideration because Karula and Hargla have been regarded as the core area of the Valga dialect. In addition to the county boundary, there is a stronger linguistic boundary as well (see Map 6), which makes western Hargla and Karula a transitional area of western Võru. This usage is rather close to southern Tartu dialects. Hella Keem (1997) joined Urvaste and Karula into the western Võru group of sub-dialects and Hargla and western Rõuge into southern Võru. There is a stronger boundary between western and eastern Hargla. Generally the Võru dialect area has to be subdivided into two larger parts: western Võru (where western Hargla and Karula are more closely related in the south and Urvaste and Kanepi in the north) and eastern Võru (eastern Hargla, Rõuge, Põlva, Räpina, Vastseliina). It seems that the contemporary Võru dialects can be distinguished on the basis of historically central linguistic differences, which in turn indicate the traditional communication regions.

Western Võru dialects are characterized by the use of external local cases instead of internal local cases, for example, *mõtsalõ* 'into the forest', *tarõl* 'in the room' The pronunciation resembles the southern Tartu dialects; in

several grammatical forms the second degree of quantity is replaced by the overlong third quantity. The southern part of the western group has a remarkable specific phonetic feature that can be found also in Mulgi and southern Tartu – reduction of low vowels in non-initial syllables. Also widespread are analogical morphological markers, e.g. *-se*, *-sõ* for the simple past: *andsõ* ‘he gave’, *käsksevã* ‘they ordered’. The eastern Võru shows the largest number of specific features; it is the most typical usage of archaic South Estonian. The South Estonian linguistic enclaves are close to it, but they manifest many influences of the surrounding language. Leivu and Lutsi reveal many Latvian features, and, similarly to Setu, Kraasna shows some influences of the local Russian dialects.

## 5. Dialectometric studies

The dialectological lexical studies, which have been conducted in Estonia since the early 1980s using the electronic databases have yielded somewhat new results about the relationships of Estonian dialects. The differences could be explained by the methods used and the data collections. Another possible reason could be that the lexical relations of the dialects differ from the groups that are based on phonetic and grammatical features.

The dialectometric studies that were conducted by Sirje Ainsaar (nee Murumets) in the 1980s were based on the electronic database of the first volume of the “Shorter dialect dictionary” (VMS; see Murumets 1982, 1983). Ainsaar analysed on the basis of this material the stereotypy dynamics of Estonian dialect vocabulary. She adopted the methods that Arvo Krikmann (1979, 1980) had applied to determine the proverb regions and the quantitative methods used in German dialectometry. Her findings contain a number of moot points, which could be explained by the uneven nature of the primary data. For example, the core relations of the dialect groups usually proceed from the sub-dialects from which exist small collections of peculiar words and not from the sub-dialects that have traditionally been regarded as central and for which there are extensive collections that contain a high degree of general Estonian vocabulary. Ainsaar continued her studies with improved research methods at the end of the 1980s (see Ainsaar 1990). Krikmann and Pajusalu (2000) used the electronic corpus of the vocabulary of the Estonian dialects of the Institute of the Estonian Language. In several respects their findings were similar to the earlier conclusions drawn by Ainsaar. Thus we can assume that they are, in principle, reliable.

The 1980s calculations about the strength of the lexical relationships revealed that the relationships between the usages that can be established in

this way differ considerably from the traditional classification of the Estonian dialects (see Murumets 1983, Ainsaar 1990). As expected, stronger relationships emerged in the periphery, but what was surprising was their nature and the formation of specific dialect groups. In North Estonia the islands and the area of the north-eastern coastal area could be distinguished rather clearly. By contrast, the central dialect disintegrated into several fuzzy parts, and its eastern part joined the eastern dialect. A larger south-western group emerged in South Estonia, which, in addition to the Mulgi dialect of South Estonian, overlapped with the neighbourhood of the western and central dialects of North Estonian.

The study of lexical stereotyping in the Estonian dialects that was conducted at the end of the 1990s was based on a larger database and yielded similar results, see Map 7 (Krikmann, Pajusalu 2000). According to this study, for example, the insular sub-dialects of Saaremaa, Muhu, and the Hanila western sub-dialect form one group. Hanila is the closest sub-dialect area of Muhu on the continent. Hiiumaa and Vormsi form one group, and Kihnu joins the western parishes across the sea. The sub-dialects of the western dialect also draw a number of western sub-dialects of the central dialect as far as Juuru and Türi, thus including the north-western group of the central dialect, which Murumets singled out separately. The previously mentioned areas form the larger West Estonian region. Its counterpart in North Estonia is the north-eastern region of the same size with Jõhvi as its centre in the north-eastern area. To this area are attached in addition to the north-eastern coastal dialect also most sub-dialects of the central dialect and as a group of its own the sub-dialects of the eastern dialect together with the northern Tartumaa sub-dialects of the central dialect, which are close to the latter, as far as Põltsamaa. Thus, there is a southwestern-southeastern demarcation zone between the North Estonian dialects that runs from Tallinn to Põltsamaa, which was pointed out already by Wiedemann (1873). The sub-dialects of Türi and Pilistvere in Central Estonia make up the zone that unites the western and north-eastern regions.

The findings of Murumets 1983 and Krikmann, Pajusalu 2000 show a correlation also in South Estonia. In both cases Mulgi and eastern South Estonia are highlighted. The large dialect group that emerges in south-western Estonia becomes even larger in Krikmann-Pajusalu, affecting also Tori of the western dialect and Suure-Jaani of the central dialect. However, there is a difference regarding the grouping of the Tartu and Võru dialects. According to Krikmann-Pajusalu, Helme joins the eastern South Estonian; according to Murumets, it remains part of Mulgi. The study by Murumets shows that the relationship centres are in Tartu and western Võru, and these dialects remain separately. They join Võru only in the south-western edge of Sangaste,

which belongs to the Tartu dialect, and in the north-eastern edge of Võnnu. According to Krikmann-Pajusalu, all the relationship centres are located in the southern and eastern peripheral areas of the south-eastern South Estonia, including Setu.

What could we learn from the comparison of the traditional dialect classification and the dialectometric studies? First, the dialect boundaries that are based on phonetic and grammatical differences and lexical relationships overlap to a remarkable degree; in some cases, however, they reveal systematic differences. The most important difference is that the lexical relationships highlight the difference of the central dialect from the other dialect areas. It is a stereotypic zone, the parts of which join more peculiar peripheral dialects. In the south-west the areas of the central dialect join the South Estonian dialect even across the border of the main dialect. The emerging area reminds to some extent the ancient Sakala County, which, however, corresponds to the later trade zone of South Estonians on the coast and in Central Estonia. On the basis of vocabulary the peculiar usage of the tiny island of Kihnu clearly joins the western dialect and not the insular dialect. Thus, it correlates with the daily communication area of the population of Kihnu. It is remarkable that the lexical region correlates well with the cultural region suggested by ethnologists (see Moora 1956). As for folk culture, the Estonian area is first divided into western, north-eastern, and southern cultural regions. South Estonia is further subdivided into Mulgi, Setu, etc.

## 6. Estonian sociodialectology

The study of the Estonian dialects in the social context became possible only in the late 1980s when at the time of perestroika sociolinguistics became acceptable as a research area in Soviet Union. Some linguists had earlier pointed to the problem of dialect levelling (Parbus 1966). Unfortunately, there are no studies of linguistic communities because it was not allowed to conduct any studies that contained sociological data (for a history of Estonian sociolinguistics see Hennoste *et al.* 1999).

The first study of the levelling of dialects was carried out in Karksi in the Mulgi dialect area of South Estonian in 1984–1986 (Pajusalu 1987). It compared the dialect usage of 12 persons from Karksi (born in 1901–1934) with the dialect texts that had been recorded in 1932–1944 (the informants had been born in 1860–1875). Half of the respondents were males, and half of them were females. The study focused on verb forms in idiolects; later on the idiolects were grouped according to similarities. The study revealed remarkable differences between the idiolects. However, more general development

trends could be established on the basis of groups. The dialect usage of the informants born in 1901–1910 was characterized by replacement of specific dialect forms by broader South Estonian forms. The speech of the informants born in 1924–1934 revealed numerous influences of the North Estonian usage. For example, in the old Karksi dialect there were *n*-marked past participle forms; in the second group, however, the generalization of the *nu*-marked general South Estonian forms was under way, and the speech of the youngest generation already revealed *nd*-marked North Estonian forms, cf. *kasun* ‘grown’ ~ *kasunu* ~ *kasvand*. The same study served as a basis for discussing variation in the past participle forms in Keevallik, Pajusalu 1995. Thus, manifestations of abrupt levelling of the dialect could be observed already in the usage of people born in the 1920s, whereas more levelling could be observed in the speech of females.

For the first time the dialect usage of all the people of a single village who were at least ten years old was taped in 1991–1993 (this study is described in Org *et al.* 1994). It was the little Sute village in Vastseliina parish in the eastern periphery of Võrumaa in South Estonia. All in all the speech of 26 villagers was recorded, the oldest of which was a 95-year-old woman and the youngest was an 11-year-old boy. Various phonetic phenomena and morphological forms were observed. When analysing the speech of Sute people such markers were taken into account as age, sex, and education. The dialect usage was analysed by three generations (the older generation comprised of people born before 1935, the middle generation included people born in 1935–1960, and the younger generation covered people born in 1961–1980). These age groups were further subdivided into smaller age groups.

The findings differed considerably in comparison with the Karksi study. The older and the middle generation had a rather good knowledge of the dialect, and they did not mix it up with the standard language. There is no doubt that it was partly due to the fact that the Võru dialect differs considerably from Standard Estonian. They were knowingly differentiated as two opposite linguistic varieties. On the other hand, the Võru dialect must have had a stronger position in the daily life than in the case of the Mulgi dialect spoken not far from Central Estonia. The speech of the middle generation in Sute revealed newer western Võru forms that seem to point to the emergence of a new regional common Võru vernacular (see also Pajusalu *et al.* 1999). At the same time, the speech of the younger generation and better-educated middle-aged females already revealed some direct loans from the standard language both in morphology and vocabulary. Actually, such cases were not numerous. To conclude, the dialect usage of male speakers was more consistent.

Informants of various ages were interviewed about their language attitudes, for example, the range of dialect functions, the relationship between

the dialect and Standard Estonian, and the future prospects of the dialect. It appeared that there was no correlation between the knowledge of the dialect and its appreciation. In general the dialect was valued rather highly. But it was an inversely proportional relation. Even older people with a good knowledge of the dialect had their reservations concerning the future of the Võru dialect. The younger people were much more optimistic.

The same database was used in a somewhat extended form also for other studies. The formation of the inessive was studied in the case of 31 informants (see Pajusalu *et al.* 1999). The VARBUL analysis showed that this *h*-marked eastern Võru area is witnessing the generalization of the *n*-marker of western Võru, which is also characteristic of the Mulgi and Tartu dialects and the old Tartu literary language. The alternation of the markers *-h* and *-n* reflects the ongoing linguistic change, which is led by young educated females (see Pajusalu *et al.* 1999: 96–97). However, the proportion of the *s*-marked standard forms remained rather modest even in their speech. Võrumaa is a diglossic area, the standard language and the dialect are kept apart from each other. At the same time the specific features characterizing the narrower sub-dialects are retreating, and a new regional common Võru language is emerging.

The usage of the peculiar Kihnu insular dialect in contemporary society was studied on Manilaid (Grigorjev *et al.* 1997). The researchers taped the speech of 34 out of 43 local inhabitants of this small island, including children and old people. They analysed vowel harmony, diphthongs, negational forms, partitive plural forms and the alternation of the highly frequent conjunction *ning* 'and' and its all-Estonian equivalent *ja*. Also sex and age differences were taken into account. On Manilaid the oldest form of the dialect survives in the speech of older and middle-aged females, which differs from the findings of the studies on South Estonian. At the same time the speech of young girls was closest to the standard language; the speech of young men revealed more dialect features. In general the assimilation of the dialect was rather abrupt in younger people. Their speech could be regarded as Colloquial Estonian with some dialect features. The phonetic features have survived better.

A comparison of the studies on levelling in Mulgi, Võru, and the insular dialect shows that the dialect has retreated most rapidly in Mulgi, which is a South-Estonian area on the border with North Estonia. In that place the abrupt loss of the dialect resembles a language switch. On the island of Manilaid the speed of assimilation is also rapid, but the change is smoother, and at least some regional phonetic features survive. The position of the dialect is the strongest in the core South-Estonian area in eastern Võru. The dialect is still used there in village life as the language of all the generations. The principal

change is the retreat of the narrower dialect features and the development of a broader common Võru dialect. At the same time, there is also the danger of an abrupt language switch, transition to the standard language, as sociological studies of linguistic attitudes have shown.

In Estonia dialect sociology was introduced in the late 1990s in the course of studying the social tensions of Setus. After Estonia gained independence, the Setus remained on both sides of the Estonian-Russian frontier. Their normal social life, communication between the relatives, and visits to churches and cemeteries have become inconvenient to a considerable degree. In 1997 the Võru Institute launched a project "Survival prospects of the original settlement of historical Setumaa" (see Eichenbaum 1998, Eichenbaum, Pajusalu 2001a, 2001b). During this study 499 adults (aged 18–74) and 164 schoolchildren (aged 15–18) of the Estonian part of Setumaa were questioned. The study included also questions about linguistic attitudes and identity. Soon after this study the Võru Institute conducted another study "The customs, language, and identity of south-eastern Estonians in 1998" (see Koreinik, Rahman eds 2000). During this study 600 inhabitants (aged 25–64) of south-eastern Estonia were questioned. All the respondents provided detailed personal information, also concerning their occupation, source of livelihood, activities, etc. It was also studied how Setu and Võru people define the local dialect, how well they know it and how often they claim to use it, what is the significance of the local dialect for them, and how they estimate its future prospects. The sociological studies did not measure their actual command of the dialect.

The Setu study showed that most people regarded the local dialect as the Setu language. A recent problem is the opposition between Setu and Standard Estonian. For example, about 30 per cent of Setu schoolchildren regarded Setu as an independent language, 31 per cent thought that Setu is part of the Võru language. Only 17 per cent regarded it as part of Estonian, some were unable to provide an answer (see Eichenbaum, Pajusalu 2001a). Among the respondents of the south-eastern Estonia study about 61 per cent regarded the local language as the Võru language, only 5.4 per cent regarded it as the Võru–Setu language. Very few people mentioned the South-Estonian dialect in general or a dialect of a narrow region (see Koreinik, Rahman eds 2000, Table 1.1). Thus, we can claim that people are aware of the broader regional languages such as Setu or Võru in south-eastern Estonia.

Equally half of the inhabitants of Setumaa and Võrumaa claimed that they use the local language (dialect) on a regular basis. In addition, every fourth person in Setumaa and every fifth person in Võrumaa use it from time to time. At this one should point out that the poll covered all the inhabitants of the county, not only the ethnic Setu and Võru people. Of the ethnic Setus

the majority (78 per cent) claimed that they speak Setu on a daily basis, and the rest (20 per cent) claimed that they do it from time to time. Among the ethnic Võru people some 63 per cent claimed that they use the local dialect every day; about 24 per cent claimed that they speak it from time to time. Thus, judging by the self-evaluation of Setu and Võru people the local usage is firmly established (Eichenbaum, Pajusalu 2001a). Yet the use of the local dialect drops abruptly among younger people, females, and people with a higher education, which points to the low prestige of the local dialect. However, the method of earning one's living, occupation, and other social factors did not contribute significantly. The most important factor is education (see Pajusalu *et al.* 2000b). The Võru people were more optimistic than the Setus concerning their future prospects despite the fact that in their case the language was used on a smaller scale. The lower degree of optimism among Setus is probably related to the more serious problems affecting their social life.

The Võru Institute conducted a similar sociological survey in Saarte County in the summer of 2001. All in all 378 permanent residents aged 25–64 were questioned (Koreinik *et al.* 2001). The majority of respondents considered the local dialect usage to be either the language or dialect of this island where he or she lives. As most respondents were from Saaremaa, then also the majority of answers concerned the Saaremaa dialect/language (73 per cent). Unlike southern Estonians, the islanders used the terms 'dialect' and 'language' as synonyms. For them the term *murre* 'dialect' does not carry a pejorative connotation of 'incorrect language' as in the case of Setus or Võru people. However, there were more islanders than south-eastern Estonians who claimed that there is no local dialect (all in all 13 per cent). Half of the respondents (52 per cent) claimed that they spoke the local dialect on a daily basis; the majority of the rest (34 per cent) claimed that they spoke it from time to time. These percentages are fully comparable to south-eastern Estonia. What was rather different was that the self-reported frequency of use was statistically non-significant in terms of generations and sexes. This finding does not probably mean that the insular dialect is not undergoing levelling at least on a limited scale (cf. the findings concerning Manilaid), but rather it would show the higher local prestige of the insular dialect in comparison with the south-eastern dialects. Also, the islanders were rather optimistic about the future of their dialect.

The noted discrepancies in the findings of south-eastern Estonia and Saare County can be explained by the development of Estonian society. Modern Estonia is centred around North Estonia. The major economic centres are located there, and the people are more prosperous. Also, its language is the historical North Estonian language or the Tallinn language. Tallinn is the

capital of Estonia and its most important centre. South-eastern Estonia is the poorest part of Estonia from the economic perspective. The attitude towards Setus has been unfavourable, and it is not respectable to be a Setu or Võru person elsewhere in Estonia. Also, the West-Estonian islands are not the richest part of Estonia. On the other hand, many islanders have settled down in North Estonian towns, and they enjoy a high prestige in Estonian society.

The studies of the linguistic attitudes of the islanders observed two most remarkable characteristic features of the insular dialect – the replacement of the illabial central *õ* by the labial *ö* and the so-called singing intonation. It appeared that these characteristic features are part and parcel of the standard language of the majority of lifelong islanders.

More recently Estonian accents have become a new important research area in Estonian dialectology (Hennoste 2000, Pajusalu 2003). It is apparent that upon transition to the standard language the regional accents will remain to mark the regional identity of a speaker. The accent is important not only as a marker of the dialect background, but it also indicates that the speaker has another mother tongue, such as Swedish, Finnish, or Russian. The Estonian society is rather sensitive to several accents, but the study of regional and ethnic accents is still in its infancy. Up to now the pronunciation differences of educated speakers of Estonian have been observed only in the studies of variation in spoken language (see the characterization of Colloquial Estonian by Leelo Keevallik in the present collection).

The study of sociolects and regional vernaculars has been an attractive topic in Estonian sociolinguistics since the early 1990s (Pajusalu 1992). Yet no study has proved the differentiation of Estonian usage on the basis of social classes (see Hennoste *et al.* 1999). The distinctions are based on the ethnic or regional background, age, education, or sex (see also Keevallik in this collection). As for the latter characteristics, the older age points to more dialectal features, better education and female usage indicates that the linguistic norms will be followed more closely. Slang is the only Estonian sociolect that has been described more or less adequately (see Tender 1994). Why is it so could be an interesting sociolinguistic question. Perhaps it could be explained by the smallness and the high degree of internal solidarity of the Estonian society, or it is an impact of the long-time diglossic situation. Previously Estonian used to be the language of only one social class (see Keevallik, Pajusalu 1995). Perhaps it reflects the high degree of mobility in contemporary society. It is clear that more sociodialectological research into Estonian is needed in the future.

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# IV.

## WRITTEN ESTONIAN\*

*Heli Laanekask and Tiit Erelt*

### Prehistory

By the end of the first millennium AD Estonia was an agricultural society, where fishing, hunting, trade, raids, and to some extent handicraft provided additional revenue. There was no statehood as yet. The country was divided into parishes; at the beginning of the 13<sup>th</sup> century their number amounted to about 45. Groups of parishes formed counties. The most important North Estonian counties included Saaremaa (the largest island of the West Estonian archipelago), Läänemaa, Rävala, and Harjumaa (more recently the latter two formed Harjumaa), Järvamaa and Virumaa. In South Estonia Sakala was situated to the west of Lake Võrtsjärv (more recently Pärnumaa and Viljandimaa), to the east there was Ugandi (more recently Tartumaa and Viljandimaa). To some extent the same counties have survived as administrative units to this day. About one hundred strongholds were built to protect Estonia from forays of neighbouring tribes. They were often built close to trade centres. The most important strongholds were the Rävala centre (now Tallinn) on the northern coast of the Baltic Sea and the Ugandi centre (now Tartu) at the crossroads of trade routes along the Emajõgi River in South Estonia. There were three dialect groups: the closer northern and north-eastern groups and the more separated southern group. The dialects can be further divided into geographical sub-dialects. In this context it is important to note that the Estonian dialects were divided into two separate groups – the dialects spoken in North and South Estonia. The South Estonian dialect area was divided into the Mulgi dialect to the west of Lake Võrtsjärv (in the eastern part of Sakala County, mostly in the present Viljandimaa) and the Tartu and Võru dialect to the east of Lake Võrtsjärv (in Ugandi County, mostly in the present south Tartumaa and Võrumaa). The Setu dialect in the south-eastern corner of the South Estonian dialect area will remain beyond the scope of this overview because for a long time the Orthodox Setus did not participate in the development of Written Estonian.

\* Heli Laanekask worked out the periodization of Written Estonian and contributed periods I–V. Tiit Erelt is the main contributor of the overview of the 20<sup>th</sup> century (periods VI–X).

It is thought that at the beginning of the 13<sup>th</sup> century the size of the Estonian population was about 150,000 (Mäesalu *et al.* 1997: 26). The self-designations of the population consisting of Estonian tribes used names that referred to the counties, such as *saarlane*, *sakalane*, *virulane*, *ugalane* etc. However, the name *maarahvas* ‘people of the land’ is also an ancient self-designation. The neighbouring peoples used various names for Estonians, the Swedish name was, for example, *ester*, and the German name was *Esten* (in Latin *estones*). The self-designation *eestlane* became a common self-designation as late as in the middle of the 19<sup>th</sup> century.

It was a typical oral culture – historical and literary legends, beliefs, laws and daily information was passed on orally. Rudiments of literary culture can be seen, for example, in family signs that marked the items belonging to one’s family and the runic calendar made of wooden sticks, where anniversaries were marked by runes. The patterns that decorated everyday items had their own meaning, too. Originally the Estonian word *kiri* ‘script’ denoted a patterned script, a line or sign that added variety (Mägiste 2000: 842). It was only later when it came to denote an alphabetical script. No written records are known to have existed in the pre-Christian period.

The first contacts with written culture occurred when communicating with neighbouring peoples, especially through Christianity. The cult of natural sprites and ancestors predominated the old religion of Estonians. By the 11<sup>th</sup> century the Baltic countries and Finland had remained the last enclaves of paganism – the Roman Catholic domain in the west and the Greek Catholic (Orthodox) domain in the east. The struggle for the domination of the Estonian territory between the Germanic and Slavic tribes shaped Estonian history for centuries. The Old Slavic loanwords in Estonian *rist* ‘cross’, *papp* ‘priest’, *pagan* ‘heathen’ and *raamat* ‘book’ reflect early contacts with eastern Christianity. The attempts by the princes of Kiev and Novgorod in the 11<sup>th</sup>–13<sup>th</sup> centuries to conquer Estonia did not yield permanent results. Expansion from the west was more successful. The Swedes undertook a successful crusade in Finland, the Danish church made efforts – at first without any success – to establish themselves in Estonia. At the beginning of the 13<sup>th</sup> century the Germans from Lübeck established the Order of the Brethren of the Sword in order to conquer Estonia by a crusade from the town of Riga, which had been built in the mouth of the River Daugava. The struggle that continued with Danish participation for several decades ended in 1227 with the Christianization and subjugation of Estonia.

At that time no uniform state was formed in Estonia. North Estonia (Harjumaa and Virumaa) with Tallinn as its centre went to Denmark. The rest of the territory belonged formally to the emperor of the German-Roman state, but it consisted of rather independent parts that were governed by the

bishop of Tartu (Ugandi and some parishes north of the River Emajõgi, the capital being Tartu), the bishop of Saare-Lääne (part of Saaremaa and West Estonia) and by the Livonian Order (descendant of the Order of the Sword Brethren), a sub-branch of the Teutonic Order. In addition to Latvia, Sakala and Järvamaa, the Livonian Order held some possessions also in West Estonia and in Saaremaa and Hiiumaa. After an Estonian uprising the Danish king sold his possessions to the Order in 1346. The so-called Old Livonia emerged as a loose association of the order state and bishoprics, the fragmentation of which was accompanied by constant struggle for supremacy. They were at war between themselves, with the indigenous people and with the neighbours – Denmark, Sweden, Lithuania-Poland and Russia. The towns – there were already eight towns in the 13<sup>th</sup>-century Estonia, of which Tallinn and Tartu were stronger – made efforts to pursue independent policies as well. In the somewhat more peaceful conditions of the 15<sup>th</sup>–16<sup>th</sup> centuries the population increased from the estimated 100,000 at the end of the ancient struggle for freedom to 250,000–280,000 in the middle of the 16<sup>th</sup> century (Mäesalu *et al.* 1997: 69). A number of ecclesiastical parishes were added as well. German merchants and craftsmen settled down in towns, German clergymen came to monasteries and churches. However, no German peasants settled in rural areas. Thus, a marked difference emerged on the basis of status and nationality – the Germans represented the nobility, the ecclesiastical and monasterial clergy and burghers, and the Estonians represented the peasants and the simple town people. The peasant obligations and serfdom were reinforced gradually, and by the 16<sup>th</sup> century the Estonian peasant was virtually a serf. The few Estonian vassals or monks were quickly Germanized. The German ties remained for many centuries to come.

In the conditions of continuous feud the Catholic Church and the Latin and Low German literate cultures made a stronger impact first and foremost in towns. The Estonian peasants retained their oral culture and most of their old beliefs (Viires 1998: 47–51).

### **First period of Written Estonian: the origin of two literary traditions**

The 13<sup>th</sup>–16<sup>th</sup> centuries can be regarded the oldest period of Written Estonian. The first written records in Estonian date from the 13<sup>th</sup> century. The most important historical record is the Chronicle of the Henry of Livonia (*Henrici Chronicon Livoniae*, 1224–1227), which reflects the forceful Christianization of Estonian tribes from the conquerors' point of view.

The Latin text of the chronicle includes, in addition to Estonian geographical and personal names, some Estonian words and sentences: *kylegun-dam* = *kihelkonna* 'parish (genitive)', *maia* = *maja* 'house', *laagrikoht* 'camp-site', *malewa* = *malev* 'force, troop', *waypas* = *vaipu* 'carpet (partitive plural)', *Laula! Laula! Pappi* = *Laula, laula, papp!* 'sing, sing, priest', *Tharapita* = *Taara, aita!* 'Taara, help' (Alvre 1984). The Estonian Land Registry compiled in 1241, the so-called Danish census book (*Liber Census Daniae*), contains a large number of Estonian place names and personal names. Some Estonian names can be found also in other historical records of that time. The end of the 15<sup>th</sup> and the beginning of the 16<sup>th</sup> century are represented by a few manuscripts containing a few occasional remarks in Estonian (Ehasalu *et al.* 1997: 25–27).

One can speak of the beginning of the Estonian literary tradition as late as in the 16<sup>th</sup> century in connection with the spread of printing and the Reformation that emphasized the Word of God in one's native language. Because of close ties with Germany the Lutheran Reformation soon reached the towns of Old Livonia (e.g. the new faith was proclaimed in Tartu as early as in 1523). In the countryside, however, the Reformation was delayed because of the Livonian War that broke out in 1558. Old Livonia became inexistent in this war, and Russia, Sweden, Denmark, and Poland fought for its territories. In 1561 North Estonia became part of the Lutheran Sweden and South Estonia part of the Catholic Poland. The war with Russians, however, continued for several decades.

The 16<sup>th</sup> century is represented by fragments of a book (a dozen books that are known to have existed are discussed by Miller 1978, Reimo 1989: 23–30, Annus ed. 2000: 12) and 13 manuscripts (Kingisepp *et al.* 1997: 69–70, Ehasalu *et al.* 1997) that contain shorter or longer Estonian-language notes. They enable us to follow the origin of the development of two literary languages – the language of Tallinn based on North Estonian and the language of Tartu on the basis of South Estonian. The language of Tartu was later used mostly in South-East Estonia that lies to the south of the River Emajõgi, that is, the ancient Ugandi County, the heart of the medieval Tartu bishopric, the Tartu and Võru dialect areas. In contrast, Viljandimaa in South Estonia, the Mulgi dialect area, gave rise to a literary tradition that was based on the Tallinn language. The development of the Tartu language was fostered by the Polish Catholic Counter-Reformation with Tartu as its centre. In 1583 the Jesuits established their residence and Gymnasium in Tartu. The year 1585 saw the establishment of translators' seminary. Some Estonians may have enrolled as students there (Tarvel 1971, Helk 1977). Re-Catholicization continued with interruptions until 1625 (when Tartu was conquered by the Swedish forces), serving as an important factor in the establishment of the tradition of the Tartu language.

The first longer Estonian text included three Catholic prayers that had been recorded in 1524–1532 (*Pater noster*, *Ave Maria* and *Credo*). They were entered in the Kullamaa Socage Register of West Estonia (*Wackenbuch von Goldenbeck*) in 1524–1532 by the local priest Johann Lelow and probably by his successor Konderth Gulerth (Saareste 1923, Ehasalu *et al.* 1997: 28–29, Põld 1999). The North Estonian texts of the Kullamaa manuscript, which reveal elements of both western and eastern dialects, are based on the Low German spelling system ( $y = i$ ,  $\beta = s$ ,  $e$  = long vowel:  $\beta ynnu = sinu$  ‘your’,  $mhae = maa$  ‘land’). As is characteristic of the older written language, these texts reveal many alternative spellings (*tayua ~ thaiwa = taeva* ‘of heaven’).

It has been assumed that the Lutheran publication that was in Estonian (or contained some Estonian) and was destroyed in Lübeck in 1525 (Johansen 1959, Mägiste 1970: 47–51, Miller 1978, Kivimäe 2000) may have been in the language of Tartu (Annus ed. 2000: 57). The first partly surviving Estonian-language book is a Lutheran catechism (Wittenberg 1535) with Low German and Estonian parallel texts compiled by Simon Wanradt and Johann Koell, two clergymen from Tallinn. It contains the first attempt to standardize Written Estonian, a recommendation to use the Laiuse dialect, a North Estonian dialect in Central Estonia, for written language. The North Estonian language of the catechism reflects both eastern and western features, which perhaps reflect the usage of Tallinn (Saareste 1930, Mägiste 1970: 52–62, Kask 1984: 78–80). The spelling follows Low German conventions and reveals considerable variation, for example, the verb form *peame* ‘we must’ occurs in five variants on a single page: *piddame ~ piddeme ~ peam ~ pyddam ~ piddama* (see Ehasalu *et al.* 1997: 75).

It is likely that a Low German draft letter may date from the 1530s (Kivimäe 1997, Alvre 1997); it contains a passage in North Estonian with some Finnish influences (*theme = Fin tämä* ‘this’, cf. Est *see* ‘this’; *encke = Fin enkä* ‘I (don’t)’, cf. Est *ega mina ~ ja mina ei* ‘I (don’t)’) and reveals even some Swedish features (Swe *men* ‘but’, cf. Est *aga* ‘but’). These and some other records show that the North Estonian written language or the language of Tallinn began to develop in the 16<sup>th</sup> century.

The South Estonian written language began to emerge at the same time. Some written records show that a Lutheran catechism was translated by Franz Witte, a pastor from Tartu, and published in Lübeck in 1554, and a Catholic catechism was compiled by Jesuits in Tartu and published in Vilnius in 1585. The books were in the language of Tartu, but, unfortunately, no copies of them have been found (Johansen 1935, Miller 1978: 25–26, Jakoobi 1983, Kivimäe 1993, Annus ed. 2000: 59–60). Some Estonian-language church songs had been added to both catechisms. The end of the century is represented by three surviving writings from Tartu (Mägiste 1970: 63–79, 84–89,

Ehasalu *et al.* 1997: 38–39, 41–44) that reveal some South Estonian features in phonetics and morphology. For example, a confession made to the physician Sigismundus Awerbach in 1589: *katz* = *kats* ‘two’, cf. NE *kaks*; *lienast* = *liinast* ‘from the town’, cf. NE *linnast* ‘from the town’; *ehen* = *een* ‘in front’, cf. NE *ees* ‘in front’; *ohm* = *om* ‘is’, cf. NE *on* ‘is’ and in vocabulary as well (*kohlnut* = *koolnud* ‘dead’, cf. NE *surnud* ‘dead’). The spelling and wording of the religious texts by the Jesuit fathers Johannes Ambrosius Völcker and Laurentius Boierus reveal some Latin (*s* = *s*, *i* = *i*: *sinu* ‘your’; *ae* = *ä*: *taena* = *täna* ‘today’), Swedish (*ck* = *hk*: *pucke* = *puhkke* ‘(you) blow’), and Polish features (*ie* = *e*: *pasunie* = *pasune* = *pasuna* ‘of a trumpet’; *oinas* ‘ram; lamb’ in the sense *Jumala tall* ‘God’s lamb’, cf. the Polish diminutive *baranek* ‘little lamb’). A number of North Estonian features in the Tartu language can be traced back to the spoken Tartu language or to the influence of texts in the Tallinn language.

16<sup>th</sup>-century sources show that North Estonian dialects had retained fortis stops and some areas still revealed vowel harmony (*leppütey* = *lepütäjät* = *lepitajad* ‘reconcilers’), the possessive suffixes (e.g. the second person suffix -*s*: *Synu tachtmas* = *sinu tahmine* ‘your wish’), the conjugable negational word (*meye emme wöi* = *meie ei vöi* ‘we cannot’), and the *n*-ending genitive (*ayno poian* = *ainsa poja* ‘of the only son’). The comitative case was expressed by means of the genitive and the postposition *kaas* ‘together’; it later gave gradually rise to the present case ending -*ga*: *peye kaes* = *päivä kaas* = *päevaga* ‘in a day’, *ßwkas* = *suga* = *sinuga* ‘with you’ Syncope and apocope had already taken place (*towsma* = *tõusma* ‘to rise’, *leybp* = *leib* ‘bread’), and a new imperfect with -*si*- is emerging (cf. the *i*-past form *wöth* = *vött* = *vöttis* ‘he took’ and the *si*-past forms *murdis* ‘he broke’, *andis* ‘he gave’). The texts from Tartu suggest that towards the end of the 16<sup>th</sup> century the *n*-genitive had almost disappeared in South Estonian and that the development of the comitative case was almost complete: *wilia ka* = *viljaga* ‘with grain; with life’, *hälega* = *häälega* ‘with voice; aloud’ (ENE: 212).

The written records of the 13<sup>th</sup>–16<sup>th</sup> centuries served as the basis for a dictionary of the oldest Estonian written language (Ehasalu *et al.*), which does not cover the personal and geographical names in the Livonian Chronicle by Henry, the Danish census book or elsewhere (Ehasalu *et al.* 1997: 22). It contains altogether about 565 headwords (representing about 2,400 textual words). About three fifths of them are simple words, including over 60 more recent loanwords (i.e. those which may have entered the language during the period of the oldest written language). The latter are mostly Low German loans (or mediated by Low German, presented below in contemporary spelling): *arst* ‘doctor’, *ingel* ‘angel’, *kunst* ‘art’, *meister* ‘master’, *missa* ‘mass’, *paast* ‘Lent’, *pasun* ‘trumpet’, *prohvet* ‘prophet’, *raad* ‘city council’, *rööv*

'robbery', *sakrament* 'sacrament', etc. There are also over 120 derivatives (*süüdlane* 'guilty person', *kahjulik* 'harmful', *sõprus* 'friendship', *ilus* 'beauty') and over 40 compounds (*abielu* 'marriage', *maamees* 'man from the country', *õnnistegija* 'the Saviour'). In addition, there are some phrasal verbs (*ära petma* 'deceive', *andeks andma* 'forgive'). About 14 per cent of the entries are either unknown in the contemporary standard language or are used in a different sense. For example, the native word *rasv* 'fat' was used in the sense *võidmine* 'anointment', *kaema* 'look' in the sense *suvatsema* 'bother, take the trouble', the loanword *junkur* 'Junker' in the sense *neitsi* 'virgin', *pidal* 'leprosy' in the sense *hospidal* 'hospital'. There are some unknown words that do not occur in contemporary language, for example, the compound *vigavereline* lit. 'faulty-blooded' in the sense *mitte puhasverd* 'not thoroughbred', the verb *armatama* in the sense *halastama* 'have mercy', the loanword *hilis* in the sense *vaestemaja* 'poorhouse'. As most of these texts deal with religious and legal language, there are many words that denote abstract phenomena or activities. Words describing nature, things, or food are few in number (Kingisepp *et al.* 1997: 77–86).

Thus, Written Estonian developed, on the one hand, on the basis of spoken language, and, on the other hand, on the basis of earlier Indo-European written languages (especially German and Latin). The syntax of the written language differs from that of the spoken language, and the vocabulary of special languages can only partly be based on popular language. Moreover, these texts were mostly written by foreigners or their authors had received their education abroad. The texts were mostly translations. These circumstances contributed to features that were not typical of the previous popular language on all levels of the written language, including morphology and syntax. For example, negation with the personal ending *Sina ei peat* in the sentence by Johannes Ambrosius Völcker *Sina ei peat tachtma sinu læhæmbe neine* = *Sina ei pea tahtma oma ligimese naist* 'you shall not covet the wife of thy neighbour' reveals an obvious German influence (cf. Ger *du sollst, du sollst nicht*) while the corresponding Estonian negative verb forms lack personal endings. The nominative total object *neine* = *naine* 'wife' reveals a foreign influence as well because the Estonian transitive verb *tahtma* 'want, wish' takes the partitive object. Thus, the partitive form *naist* would be characteristic of Estonian. In the expression *se Sacrament sest rystmast* = *see sakrament sellest ristimisest* lit. 'this sacrament from this baptism' from the catechism by Wanradt-Koell the Estonian demonstrative pronoun *see* 'this (nominative)', *sellest* 'this (elative)' is used in the function of the article, which is uncharacteristic of Estonian. Here the attribute, which usually stands in the genitive and precedes the head in Estonian, is in the elative and is postposed (cf. Ger *das Sakrament der Taufe* or *das Sakrament von der Taufe*;

the contemporary Standard Estonian construction is *ristimise sakrament* 'baptismal sacrament').

Some foreign influences in early written Estonian could be explained by ideological and social factors – some vernacular features in Catholic and early Protestant texts could be discarded later as reflecting Catholic usage or the usage of low-ranking Estonian clergymen (Ross 1999).

A comparison of the number of printed copies and the population size shows that in the 16<sup>th</sup> century 1–2 per cent of the population may have been literate, including a few Estonians (Liivaku 1995: 17–20).

### **Second period: expanding text corpus and the beginning of conscious standardization**

One might claim that the second period in the history of written Estonian covers the period since the beginning of the 17<sup>th</sup> century until the publication of the South Estonian New Testament in Riga in 1686. At first the historical events did not favour the development of the written language. In 1600 the war for Old Livonia resumed, accompanied by famines and the plague. In 1629 the entire continental Estonia was incorporated into Sweden; in 1645 Saaremaa, which had belonged to Denmark since 1559, was united to Sweden as well. It may well be that the Estonian population decreased by more than a half after the wars in the 16<sup>th</sup> and 17<sup>th</sup> centuries. In the 1620s the population dropped below 100,000. However, upon the arrival of peace the population showed rapid growth, partly on account of resettlers from the neighbouring areas but mainly because of the higher birth rate. It is likely that before the great famine of 1695 the population of Estonia was over 350,000 whereas, for example, the Finnish and Latvian resettlers had quickly become Estonianized (Mäesalu *et al.* 1997: 108–110). The cultural ties with Germany and the influence of the local German nobility and clergy continued under the Swedish rule. The Lutheran Church gained some strength, and the publication of religious literature became more regular. In 1632 a university was set up in Tartu, the language of instruction being Latin. One of its aims was to locally train clergymen and officials for the new provinces of the Swedish state. Not a single Estonian student is known to have enrolled at the Swedish university. However, the professors and students were expected to know some Estonian, and some intellectuals wrote occasional poetry in Estonian (Piirimäe 1993). The Swedish period saw the beginning of elementary education in the vernacular (for a more detailed account see Peebo 2001: 10–17). As a result, Lutheran literature and education could spread more efficiently.

This period is characterized by a remarkable increase in the Estonian-language corpus. It is believed, for example, that at least 30 books were published between 1630 and 1680 – nine catechisms and other religious textbooks, five hymnals, four gospels and epistles, three collections of sermons, two prayer books, two handbooks of rituals, two primers and three Estonian grammars (Annus 1991: 288). The period witnessed the development of two written languages. The language of Tartu endured because of the tradition and the ancient dialectal differences. The new administrative borders partly strengthened and partly weakened the position of the Tartu language. Estonia was divided into two administrative units: in the north there was the province of Estonia with Tallinn as its capital, in the south the province of Livonia shared by North Latvia, its centre being at first Tartu and then Riga. Saaremaa belonged to the Livonian province as a separate county. This division lasted until the Russian February Revolution in 1917. Tartu remained the Estonian centre of Livonia, and the authors of ecclesiastical literature in the Tartu language worked mostly in Tartu and in the parishes situated to the south. As the clerical consistories of both provinces were responsible for the publication of literature in the vernacular, the upper consistory of Livonia had to publish books in the Tallinn and Tartu varieties of Estonian as well as in Latvian. It was a difficult task from the commercial point of view. In addition, there were constant quarrels with the clergy of the Estonian province. The Tartu linguistic area was smaller than the Tallinn linguistic area in Livonia. The Estonian part of Livonia included 52 parishes; South Estonian dialect was spoken in 20 parishes (Annus ed. 2000: 8). However, in Viljandimaa, which belonged to the South Estonian area, mostly literature in the Tallinn language was used. At first it did not hinder the publication of literature in the Tartu language because the General Superintendent Johann Fischer, who led the Livonian Church in 1673–1699, was an excellent organizer and publisher. The progress made in Estonian public education and literary language during the last quarter of the 17<sup>th</sup> century has been regarded even as a cultural explosion (Peebo 2001: 14). As many as 20 books in the Tartu language and 12 books in the Tallinn language were published in Riga between 1632 and 1694; in 1601–1703 all in all 87 books were published in Estonian, 23 of them in the Tartu language (Annus ed. 2000: 12).

This period saw the beginning of conscious standardization of the written languages – authoritative religious texts and the first grammars were published and usage became somewhat more uniform. The majority of writings were still translations of religious texts, which were read and delivered orally to the population usually by German clergymen, more rarely by some literate Estonian. It has been assumed that in the first half of the 17<sup>th</sup> century the percentage of literate Estonians may have reached ten per cent or even more

(Liivaku 1995: 19–21). Thanks to the network of folk schools and domestic teaching, established under the Swedish rule, literacy improved considerably in the 17<sup>th</sup> century. More and more books were published with the Estonian population in mind.

The first example of an extensive work in the North Estonian written language is the collection of 39 sermons by Georg Müller, pastor of the Estonian congregation of the Church of the Holy Spirit in Tallinn, dating from 1600–1606, altogether 404 pages of a quarto manuscript (Reiman 1891). A dictionary based on the sermons (Habicht *et al.* 2000) includes 1803 headwords and 457 cross-referenced entries. In the multilingual Tallinn the lower and the middle classes spoke Estonian and Low German; there were also some Swedish and Finnish-speaking people. High German was the acrolect that spread together with the Reformation. Müller had grown up in Tallinn and had been educated in Germany. His usage represents scholarly language, where Estonian is intertwined with Latin, Low German, and High German (Ariste 1981: 26–33). Müller's vocabulary includes over 200 Low German loans because Low German was considered to be appropriate for addressing common people: *Jumala Verdenste* = *jumala teene* 'God's service', *se toine Orsak* = *teine põhjus* 'the second reason'. Estonianized spelling was used for many of these loanwords, which shows that people used them (Ariste 1981: 109–129). Müller's sermons include passages in Estonian, which he had translated from Latin and German (Ariste 1981: 27–28). It is even possible that Müller may have written some of his sermons down later, for example, for the inspectors or for some other reasons. The sermons were never delivered in the form that they were written down (Masing 1999: 202–203, 226–237). The Estonian spelling, as used by Müller, reveals a large number of variants and is a mixture of High and Low German spelling systems. The dialectal background shows some forms of the north-eastern coastal dialect, which are typical of Tallinn, as well as some western features. The quotations from the Scriptures reveal traces of an earlier church manual, either in manuscript or a printed book, that has not reached us (for a more detailed treatment see Masing 1999: 135 ff.). His syntax reveals some German features of older written Estonian that had already occurred in texts of the previous century. Such features include use of the article (*se Eikedus* = *õigus* 'law; right'), adpositional use in place of the case (*keickede aßiade siddes* = *kõikides asjades* 'in all the things'), personal endings in negative verb forms (*eb me e mittekkit holime* = *me ei hooli midagi* 'we don't care at all'), use of the nominative plural of the noun after the numeral in place of the partitive singular, which is characteristic of Estonian (*mitto tuhat Inimeßet* = *mitu tuhat inimest* 'several thousand people'), the total object in place of the partial object (*eth me e Inimeßet oma pattune Ello piddame parrandama*

= *et meie inimesed oma patust elu peame parandama* ‘that we, people must improve our sinful life’).

The first extensive printed works in North Estonian were published by Heinrich Stahl. They included a four-volume church manual *Hand- und Haußbuch* (1632–1638, about 1,000 pages in Estonian and German), a book of sermons in two parts *Leyen Spiegel* (1641–1649, about 800 pages in Estonian and German), and the first textbook and dictionary of Estonian *Anführung zu der Esthnischen Sprach* (1637), a 34-page grammar and a 100-page German-Estonian dictionary with over 3,200 Estonian equivalents for about 2,380 German words (Kask 1970: 38–47, Rätsep 1987, Kingisepp 1995, Paul 1999: 229–242, Habicht 2001). His texts, which had been compiled on the basis of various manuscripts that had circulated among clergymen, and grammatical views summarize the development of 17<sup>th</sup>-century North Estonian. Stahl’s texts became a codification that the next generations of men of letters, willingly or unwillingly, followed. The Estonian spelling system according to Stahl proceeds from High German and is more consistent than, for example, that of Müller. A long vowel is often marked by *h* and *e* stands for *ä* (*hehste* = *hääste* = *hästi* ‘well’), a short vowel is marked by two following consonant letters (*kurri* = *kuri* ‘cruel’). The vowel *õ* is mostly marked by *ö* (*pöld* = *põld* ‘field’, *könnelen* = *kõnelen* ‘I speak’), but *a*, *o* and *e* may denote the pronunciation *õ* or reflect the pronunciation of that time (*aunapuh* = *aunapuu* = *õunapuu* ‘apple tree’, *sanna* = *sana* = *sõna* ‘word’, *pohjast* = *põhjast* ‘from the bottom’, *keick* = *keik* = *kõik* ‘all’). *gk* stands for *g* (it is possible that the stop consonant may have been pronounced with greater force: *tigke* = *tige* ‘wicked’). One can find *c*, *ch*, *ck*, *ff*, *w*, *tz*, *x* that are characteristic of German spelling (*Cörtzus* = *kõrtsis* ‘at the inn’, *üchte* ‘one (partitive)’, *offer* = *ohver* ‘victim; sacrifice’, *wabbadick* = *vabadik* = *vabatalupoeg* ‘freeman’, *hexitus* = *eksitus* ‘mistake, error’). The usage of Stahl, who came from Tallinn and lived in Järvamaa and Virumaa, reveals features of several North Estonian dialects. Stahl’s dictionary provides synonyms from different dialects, including South Estonian, for example, NE *ember* = *ämbër*, SE *pangk* = *pang* ‘pail, bucket’; NE *hahv* = *haav*, SE *rei* ~ *reig* ‘wound’; NE *hunt*, SE *sussi* = *susi* ‘wolf’; NE *wend* = *vend*, SE *welli* = *veli* ‘brother’ Stahl’s syntax follows the foreign-inspired traditions of early written Estonian. Articles are common, the genitive is often expressed by the elative (*se waim sest tõddest* = *tõe vaim* ‘spirit of the truth’) and the grammatical cases are expressed by means of adpositions (*taiwa sisse* = *taevasse* ‘into heaven’, *pohja pehl* = *põhjal* ‘on the basis of’). The negative verb forms reveal personal endings (*ep lehwat* = (*nad*) *ei lähe* ‘they do not go’). One can find examples of the *saama*-future, and reflexivity is rendered by the reflexive pronoun *hend* = *end* ‘oneself’ (*sihs sahte teije hend rõhmustama* = *siis te rõõmustate*

'then you will rejoice'). The noun in the numeral phrase is in the nominative plural (*kax jallat* = *kaks jalga* 'two feet', *ligki wihs tohat meehet* = *ligi viis tuhat mees* 'nearly five thousand men'), etc. Similarly to Müller, Stahl's language reveals a large number of (Low) German loanwords (Ariste 1981: 129–147), e.g. *Först* = *vürst* 'prince', *Spegel* = *peegel* 'mirror', *vordeninut* = *teeninud* 'served', *günnima* = *soovima* 'wish', *giff* = *kihvt* ~ *mürk* 'poison', *köstlickud* = *hinnalised* 'expensive (nominative plural)', *doch* = *ometi* 'yet'.

At that time numerous variants were common and rules were not strict, which is proved by the fact that the writings of different authors continue to reveal regional or foreign influences. Thus, the Turku manuscript reveals some features of written Finnish of that time. The latter is a 19-page manuscript from the beginning of the 17<sup>th</sup> century that contains religious texts in Estonian and was discovered in the archives of the Turku Cathedral. It was probably written by a Finn that worked in Estonia as a pastor. The sermons by the Swede Lars Vigaeus, pastor of Karuse in West Estonia from 1639 to 1663 reveal, however, some features of Swedish and the western dialect (Kask 1970: 48–51, Paul 1999: 215–217). Another textbook and dictionary of North Estonian of that time *Manuductio ad Linguam Oesthonicam, Anführung Zur Öhstnischen Sprache* (Tallinn 1660) was written by Heinrich Göseken, pastor of Kullamaa. Its scope is larger than that of Stahl and includes a 75-page grammar and Estonian equivalents for about 9,000 German words. It reveals several western features (Kask 1970: 51–55).

In addition to traditional features, the usage of men of letters after Stahl reveals some innovations as well. Christoph Blume, pastor of Hageri in North Estonia, knowingly did not use the letters *q* and *y* in his Estonian-language religious works (1662–1667, for a more detailed discussion see Lill 1988); he used *kk* instead *ck* and *t* instead *dt*. Similar changes can be found in the High German spelling of the time and in Blume's usage of German. Blume abandons the practice of translating the German definite article into Estonian (*sinno perral on Rikkus nink Weggi ning Auw* = *sinu päralt on rikkus ning vägi ning au* 'for thine is the kingdom, and the power, and the glory'); cf. *se: sünno on se Rickus ninck se Weggi ninck se Auw* in Stahl). In Blume the pronominal attribute does not agree with the noun as in contemporary Standard Estonian (*minno kurjast Töhist* = *minu kurjast tööst* 'about my evil work', cf. *münnust hexitussest* = *minu eksitusest* 'about my mistake' in Stahl). Blume does not use the elative in place of the genitive (*öikedusse Offrit* = *õiguse ohvrid* 'sacrifices of the truth', cf. *need Offrit sest Öigkussest* in Stahl) or the German-influenced negation (*erra pexa mind* = *ära pekka mind* 'do not beat me', cf. *erra pexa münd mitte* in Stahl). By comparison with Stahl, Blume's usage is closer to the popular language. At the same time, the numerous

North Estonian variants reflect such current changes in the Estonian language (ENE: 212) as weakening of the stops in the middle and at the end of words (*körgke* > *körge* = *kõrge* 'high', *peap* > *peab* '(he) must'), disappearance of *v* next to a labial vowel (*auwo* > *auo* = *au* 'honour'), appearance of *e* in *i*-final diphthongs (*taiwas* > *taewas* = *taevas* 'heaven'), diphthongization of long vowels (*heh*, *hä* > *hea* 'good'), development of the comitative ending (*armo kahs* > *armo kah* > *armoga* = *armuga* 'with mercy'), spread of the *de*-plural (*sullastelle* > *sulastele* 'to farmhands', *witsadega* = *vitsadega* 'with twigs'), disappearance of *b* in the comparative marker (*suhrembat* > *suremad* = *suuremad* 'larger (plural)'), development of the non-conjugable negation word *ei*, etc.

The first publication that contains some Tartu language and that has reached us is the Catholic handbook *Agenda Parva*, published in Braunsberg in 1622. The multilingual handbook provides texts for baptism, wedding, confession, and the last anointment also in Estonian, either in the dialect of southern Tartumaa or western Võrumaa. The text of about 180 words is based on Latin and partly also on Polish spelling and it speaks of a good knowledge of the language on the part of the translator (Saareste 1938, Mägiste 1939, Kask 1970: 58–60). The first Lutheran work in the Tartu language during the Swedish rule was published in Riga in 1632. It was a two-part church handbook by Joachim Rossihnius, a pastor who served a number of congregations in Tartumaa and Võrumaa (for a more detailed treatment see Kask 1970: 60–61, Paul 1999: 242–245). Its first part, the catechism, is in Estonian and German; the second part *Evangelia vnd Episteln...* is only in Estonian (with headlines in German). It is likely that when compiling the book Rossihnius was inspired by some North Estonian manuscripts because in some places the text almost coincides with the corresponding passages in Müller and Stahl. Rossihnius' spelling is close to Stahl's spelling but shows more variants. His usage reveals some characteristic South Estonian morphological features, such as *n*-final inessive *lihnan* = *liinan*, cf. NE *linnas* 'in town'; the *ss*-final translative *mullas* = *mullass*, cf. NE *mullaks* 'into soil'; the first person present active indicative without *n* in the personal ending *minna ussu* = *mina usu*, cf. NE *mina usun* 'I believe'. The South Estonian lexical features include *eckua* = *õkva*, cf. NE *otse* 'directly, straight'; *enge*, cf. NE *vaid* 'only'; *sihwuck* = *siug*, cf. NE *madu* 'snake'. Actually, the text contains some North Estonian features as well, for example, the word-initial plural morpheme *t* = *d* in places where the zero morpheme is common in South Estonian dialects: *nemmat kuhlutawat* = *nemad kuulutavad* 'they proclaim', *önnistanut* = *önnistanud* 'blessed'. The comitative case occurs already in *Agenda Parva* in a more developed form *nenä-ga* = *nenäga* = *ninaga* 'with the nose', *yalgu-ga* = *jalguga* = *jalgadega* 'with feet'. Rossihnius expressed the comitative by means

of the word *kahn*, which may have been coined after the example of the North Estonian postposition *kaas* ‘with’ (*welje kahn* = *velje kaan* = *veljega* ‘with one’s brother’). The vocabulary and syntax reveal some German influences that are known from the earlier North Estonian written language.

Some historical records suggest the existence of a Catholic catechism and a church handbook, compiled in Tartu and published in Braunsberg. It may have included a hymnal. The book has been praised for the quality of its Estonian. This book in the Tartu language has not survived (Annus ed. 2000: 62).

A number of original views were proposed by Johannes Gutsclaff, pastor of Urvaste and author of the first South Estonian grammar and dictionary *Observationes grammaticae circa linguam Esthonicam*, published in Tartu in 1648. Gutsclaff refers to both Rossihnius and Stahl (Gutsclaff 1998: 32, 34, 44–45). His Latin-language textbook (86 p) and the German-(Latin-)Estonian dictionary (1714 German entries) suggest that long vowels should not be marked by *h* but by diacritical marks (*Kārn* = *kaarn* = *kaaren* ‘raven’, *kōлма* = *koolma* ‘to die’). Gutsclaff noticed palatalization (and tried to mark it by *j*: *Kotj* = *kott* ‘sack’), qualitative gradation in word-stems (nominative singular *Aick* = *aeg* ‘time’, *Sussi* = *susi* ‘wolf’, genitive singular *Aja*, *Soe*) and the significance of the genitive as the stem form for the other cases. He uses the term ‘rective’ for the genitive and compares the latter with the corresponding Hebrew case. Gutsclaff points to a number of cases, where the articles *üks* ‘one’ or *see* ‘this’ are not used, e.g. *ta om Rammat* = *see on raamat* ‘this is a book’ not *ta om ütze Rammat* = *see on üks raamat* lit. ‘this is one book’; it is more common to say *Jummala Poick* = *jumala poeg* ‘Son of God’ than *poick sest Jummalast* lit. ‘son from this God’ (for a more detailed discussion see Kask 1970: 61–62, Lepajõe 1998, Peebo 2001: 21–24). Gutsclaff’s usage is largely based on the Tartu dialect that he picked up while enrolled as a student from Germany at the University of Tartu. His usage, however, reveals also some local features of the place where he worked – the Urvaste sub-dialect of the Võru dialect (Valmet 1986, Peebo 1995, Keem 1998). Gutsclaff may have been prepared a 640-page translation of the first third of the Old Testament into the Tartu language (Tering 1979: 30).

The most outstanding monument of the Tartu language is the translation of the New Testament *Meie Issanda Jesuse Kristuse Wastne Testament* ‘The New Testament of Jesus Christ Our Lord’ (Riga 1686). It was translated by Adrian Virginus, a pastor born and working in the Tartu dialect area, his father Andreas, and a few assistants (Paul 1999: 335–346, Peebo 2001: 25–30). The book is probably the first completely Estonian-language work that was intended for Estonians (EKA: 148). Efforts were made to avoid everything that could have been foreign to a peasant (Peebo 1989: 726). Some

traditional spelling features include, for example, *h* as a marker of the long vowel (*Mahmehs* = *maamees* ‘country man, Estonian’) and the digraphs *ch*, *tz*, *sz* (*tüchjäs* = *tühjäss* = *tühjaks* ‘empty (translative)’, *sesinatze* = *seesinatse* ‘this’). However, the digraph *ck* and the letters *f*, *q*, *x* and *y* are not used. The biblical names are provided in the vernacular form: *Jahn* = *Johannes* ‘John’, *Pahwel* = *Paulus* ‘Paul’. South Estonian forms are used more or less consistently: the plural without *-d* ~ *-t* (*nemmä olliwa söhnu* = *nemad olid söönud* ‘they had eaten’), the *n*-final inessive (*kigin asjun* = *kõikides asjades* ‘in all the things’), the *ss*-final translative (*wehatzwzs* = *vihaseks* ‘angry (translative)’) (Kask 1970: 62–64) etc. The vocabulary includes some words that are now common (*Zirgul* = *linnul* ‘bird (adessive)’, *Usaida* = *õue* ‘into the yard, to outside’) and also some rare words (*awwa* = *avalik*, *ilmne* ‘open, obvious’, *haugu* = *rumal*, *narr* ‘stupid’, *heisklemine* = *vaidlemine* ‘debating’, *pohatama* = *ohkama* ‘give a sigh’). The vocabulary includes some foreign words (in modernized spelling: *element* ‘element’, *pelial* ‘evil-doer’, *marmor* ‘marble’, *ristal* ‘crystal’), but their number is smaller than in Stahl or Rossihnius. There are many translation loans (*koduotsma* = *läbi katsuma* ‘afflict’, cf. Ger *heimsuchen*; *vastpalge* = *võrdkuju* ‘symbol’, cf. Gr *antitypon*). One can find examples of the prefixes *ilm-* and *kaa-* (cf. Ger *un-* and *mit-*): *ilmleplik* = *leppimatu* ‘intolerant’, *kaaskannatalik* = *kaastundlik* ‘sympathetic’. Derivatives are also numerous: *abieluriklik* = *abielurikkuja* ‘adulterer’, *patlik* = *patune* ‘sinful’, *sulasus* = *sulaseks olemine*, *orjapõli* ‘being a servant, slavery days’. The greater part of the vocabulary, however, is not rare but is characteristic of general Estonian or is known in the entire South Estonian dialect group. The New Testament includes very few North Estonian dialect words. In comparison with the early written language, the language of this work is a remarkable step towards the vernacular.

### Third period: emergence of the old spelling system and publication of the Bible

The next period is characterized by such features as convergence with the vernacular, orthographic unification of the written language – development of the old spelling system – and efforts to publish the complete Bible. This period ends with the publication of the North Estonian Bible in 1739. As early as in 1684 Bengt Gottfried Forselius, of Swedish or Finnish stock, born in Harjumaa and educated at the University of Wittenberg, started to train parish clerks and schoolmasters from among Estonian rural people and for them (Andresen 1981, Piirimäe 1984). Forselius taught the country children

how to read by using a new and efficient phonetic method, which made the foreign letters *c, f, q, x, y, z* and *h* as the marker of the long vowel confusing and unnecessary. In addition, Forselius, for example, did not recommend the use of personal endings in the negative because they did not occur in the vernacular (Kask 1970: 65–67). Forselius was probably inspired by similar attempts to reform the language that were underway in Sweden and elsewhere in Europe (Piirimäe 1984: 727, Raag 1995, Aarma 1996: 401–402). Of about 160 young men who attended the Forselius Seminary about 50 became schoolmasters and parish clerks in various parts of Estonia. They laid the foundation to Estonian rural schools and improved the reading skills of young Estonians (Liiv 1934, Peebo 2001: 12–17). It has been assumed that Forselius wrote the Estonian ABC book that was published in Riga in 1685 or 1686. However, its first edition has not survived. There are copies of the ABC book in the Tallinn language (1694) and the Tartu language (1698, a defective copy from 1700) that have been regarded as reprints of the ABC book by Forselius. They reflect Forselius' spelling innovations (for a more detailed treatment see Annus 1989, Annus ed. 2000: 11, Alvre 1983, Raag 1995: 146–148, Aarma 1996).

Forselius made the same proposals at the joint Estonian and Livonian Bible translation conferences of clergymen – the first ever conferences about the Estonian language. The latter were held in Liepa, not far from Valmiera, in 1686 and in Pilistvere in 1687. The General Superintendent J. Fischer made efforts to diminish the differences of opinion between the Estonian and Livonian clergymen and to pave way to the publication of the complete Bible in North Estonian. Different attitudes towards the vernacular served as a reason for the disagreement. The Livonian clergymen who had assembled around Fischer were of the opinion that books should be written in the popular language; the clergymen of the Estonian Consistory, however, held the view that Estonians speak their language carelessly and incorrectly. Besides, they thought that Estonian should be written in strict accordance with the German spelling system, or else the German clergymen would be unable to understand the written word (Peebo 2001: 31). The reformational proposals by Forselius and others were rejected (a more detailed discussion of the language quarrels in the 1680s can be found in Paul 1999: 355–383). Forselius perished in a shipwreck in 1688, and Fischer, a supporter of the reforms, left Livonia in 1699. However, the same views are fixed in a 116-page Latin and German-language work *Grammatica Esthonica* published under the name Johann Hornung (Riga 1693, 116 p; the absence of the dictionary is compensated by a large number of examples). It is probable that this grammar was written by several authors (see EKA: 145–147). Its language is based on the eastern sub-dialects of the central dialect. It is more descriptive than the ear-

lier grammars in that there are many alternative forms. Its syntax is more vernacular than that of Stahl (Kask 1970: 68–71).

The simplified spelling by Forselius-Hornung (which was later termed as the old spelling in contrast to the Finnish-style new spelling system that became popular in the 19<sup>th</sup> century) abandoned *h* as a mark of length and foreign letters. The vowels *ä*, *ö*, and *ü* have their own characters and are not used together with *e caudata*, as was the previous practice. Only *õ* has no character of its own as yet. The following features are typical of the old spelling system: (1) the long vowel of a stressed open syllable is marked by a single letter (*ma* = *maa* ‘land’, *ramat* = *raamat* ‘book’); (2) the long vowel of a stressed closed syllable is marked by a digraph (*maalt* ‘from the country’, *siis* ‘then’); (3) the short vowel of a stressed open syllable is marked by a double consonant (*munna* = *muna* ‘egg’, *teggi* = *tegi* ‘(he) did’). The reformed written language reflects the changes in the vernacular that had taken place in the 16<sup>th</sup>–17<sup>th</sup> century. Stop consonants in the medial and final positions weakened (*teggo* = *tegu* ‘deed’, *istub* ‘(he) is sitting’), *v* disappeared from the position next to the labial vowel *u* (*auustama* = *austama* ‘to honour’, *palluma* = *paluma* ‘beg’) and *t* disappeared from the end of the imperative marker (Müller has *moistket* = *mõistke* ‘(please) understand’, Stahl has *sahkut* = *saagu* ‘may there be’, but Forselius has already *tehke* ‘do’, *õnnistago* = *õnnistagu* ‘may (he) bless’), the comitative is already there (*werrega* = *verega* ‘with blood’, *sannaga* = *sõnaga* ‘with a word’).

The opinions of Livonian and Estonian clergymen differed as to the spelling, the original text for the Bible translation, and the printing privileges (for a more detailed discussion see Aarma 1996: 401, Paul 1999: 355–421, Annus ed. 2000: 10–11, Peebo 2001: 31–33). Therefore, the publication of Bible translations was delayed for both written languages and was interrupted by the Great Northern War. Russia together with Denmark, Saxony, Poland and others waged this war against Sweden in 1700–1721. As a consequence, Sweden lost its predominance in the Baltic Sea area and had to give away several territories. In 1700–1710, when the Russian troops occupied the Estonian territory, Estonia was one of the most important battlegrounds in the war between Sweden and Russia. Estonia lost about two-thirds of its population as a consequence of the war, famine and plague – the population dropped to 120,000–140,000 (Mäesalu *et al.* 1997: 129). The Estonian territory was officially incorporated into Russia in 1721. Lutheranism, the administrative structures, and the influence of the German nobility and clergy remained. Serfdom, which had slightly weakened during the Swedish rule, strengthened considerably. In 1739, same the year when the Estonian-language Bible was published, the Livonian nobility proclaimed in the so-called Rosen declaration with the approval of the Russian central power that a peasant is the

property of his overlord. He can be sold and inherited, and his land and other property belong to the lord of the manor who can set obligations at his own discretion (Vahtre 1994: 75). However, the peace treaty gave a possibility to recover and resume the compilation and publication of ecclesiastical literature that had begun before the Great Northern War.

And yet no complete Bible in the Tartu language was published. The year 1715 saw the publication of the New Testament in North Estonian in Tallinn. The latter translation has more western features in comparison with the earlier translations in manuscript form; in other respects it follows the proposals of Forselius-Hornung (Kask 1970: 72–73, Paul 1999: 400–403). A four-part *Eesti-Ma Kele Koddo- ning Kirko-Ramat* ‘The home and church book of the Estonian language’ (Halle 1721), compiled by Pietistic Estonian pastors, was a popular book that used the old spelling system. It included a catechism and epistles, a hymnal, and a prayer book. Over 14,000 copies were published if one takes into account all the editions with minor changes (EKA: 183–185, EVRT: 194–195).

One of the compilers of the latter work was Anton Thor Helle (1683–1748), pastor of Jüri parish near Tallinn. He was born and grew up in Tallinn and received his theological education at the University of Kiel. Helle’s North Estonian textbook *Kurtzgefaszte Anweisung zur Ehstnischen Sprache* (Halle 1732) includes an 80-page grammar, a 7,000-word Estonian-German dictionary in the first edition and a selection of plant names, place names, and loanwords. In addition, he had compiled with the help of his assistants: some customs related to anniversaries, 525 proverbs, 135 puzzles, and 10 dialogues with German translations; in all 400 pages (EKA: 196). By comparison with Hornung’s grammar, Helle provides fewer alternative forms and eastern features; the influence of the western dialect has increased. The examples in the grammar part are largely new and are mostly based on the usage of Harjumaa (Valmet 1985). The dictionary stems from an unpublished Estonian-German dictionary in the western dialect by a pastor who was Helle’s contemporary (Vestring 1998). Helle abridged the manuscript by reducing the number of example sentences, word senses, and dialect variants (Kask 1970: 75–93). This clearly prescriptive handbook paved way to the translation of the Bible in North Estonian. Helle had started the preparatory work for this translation as early as in 1725 (Ross 2002: 83).

The complete Bible in North Estonian *Piibli Ramat* was published in Tallinn in 1739. Altogether 6,015 copies were printed, and 1773 saw the printing of another 4,000 copies (Annus ed. 2000: 183, 221). Taking into account the fact that the Estonian population reached half a million by the end of the 18<sup>th</sup> century (Mäesalu *et al.* 1997: 133), it makes one copy per 50 Estonians. The written language is now varied enough to be able to influence

the popular language. In addition to Helle, the Bible was translated and edited by some other pastors of Läänemaa, Harjumaa, and Tallinn (Paul 1999: 422–424, Ross 2002). The Bible was in a rather uniform old spelling. Of the diacritical marks *ñ* was used to denote the length of the corresponding sound: *miñna* = *minna* ‘to go’, *minna* = *mina* ‘I’. The intervocalic *j* was marked by *i*: *poiad* = *pojad* ‘sons’. Unlike the 1725 New Testament diphthongs were used in place of long vowels: *pä* = *pää* pro *pea* ‘head’, *sääl* pro *seäl* = *seal* ‘there’. It means that the development that occurred in North Estonian dialects is now accepted. The language of the Bible reveals specific features of various North Estonian dialects, but in comparison with the earlier texts the role of the western dialect has increased. The latter change is indicated, for example, by a more extensive disappearance of *v* from the position next to the labial vowel (*sui* = *suvi* ‘summer’, *tuike* = *tuvike* ‘little dove’), prevalence of the adverbial suffix *-ste* (*töeste* = *tõesti* ‘really’, *ussinaste* = *usinasti* ‘diligently’ but also *hästi* ‘well’). The illative of *keel*-type nouns reveals the characteristic western form *kele* = *keelde* ‘into the language’, *mele* = *meelde* ‘into the mind’. The strong-grade inessive is common (*külges* = *küljes* ‘in the side’, *kohtas* = *kohas* ‘in the place’). One can find the western *e*- and *a*-plural (*poegele* = *poegadele* ‘to sons’, *tähtaks* = *tähtedeks* ‘into stars’) and shorter forms of the impersonal (*warrastud* = *varastatud* ‘stolen’, *selletakse* = *seletatakse* ‘is explained’). Longer forms, however, occur as well: *austatakse* ‘is honoured’. Some alternative forms that come from various North Estonian dialects occur elsewhere, too: alternating weak- and strong-grade forms of the third person indicative present plural (*tewad* ~ *teggewad* = *teevad* ‘(they) do’, *peawad* ~ *piddawad* = *peavad* ‘(they) must’). The strong-grade forms, however, prevail, e.g. *hoidwad* ‘(they) hold’, *tundwad* = *tunnevad* ‘(they) feel’; there are variants of the *nud*-participle (*piddanud* ~ *piddand* = *pidanud* ‘(is said) to have’), etc. The illative case reveals short forms alongside with the *sse*-ending: *kambri* = *kambrisse* ‘into the room’, *taewa* = *taevasse* ‘into heaven’; now increasingly more *de*-plural forms (*pagganatele* = *paganatele* ‘to heathens, pagans’) occur side by side with the *i*-plural (*neist mehhist* = *nendest meestest* ‘of these men’, *tütrile* = *tütardele* ‘to daughters’). There are stem and word forms that are either archaic or have already become traditional in the written language of the time (*kattukse* = *katuse* ‘of the roof’, *meletomad* = *meeletud* ‘insane (nominative plural)’, *sanna* = *sõna* ‘word’, *keik* = *kõik* ‘all’). The syntax reveals redundancy of the partial object (*panni Josepit nende jure* = *pani Joosepi nende juurde* ‘(he) put Joseph next to them’) because since Hornung’s grammar the forms of the present participative case were presented as the accusative or the objective case. Unnecessary total objects are less common (*näggi ommad wennad* = *nägi oma vendi* ‘(he) saw his brothers’). An adjectival attribute usually agrees with its noun (*sures*

*kõrbes* = *suures kõrbes* 'in a large desert', *pahhaist tõbbedest* = *pahadest tõbedest* 'of bad diseases'). However, allative and plural forms in particular reveal older word combinations, where the adjectival attribute does not agree with its noun: *hea ja laia maa* = *heale ja laiale maale* 'to a good and broad land', *kõrge paikade* = *kõrgete paikade* 'of high places'. The archaic partitive case still occurs with the comparative degree: *wäggewam meid* = *meist vägevam* 'more powerful than us'. Adpositional expressions are common, e.g. *ütles preestride wasto* = *ütles preestritele* 'told the priests', *keige maade sees* = *kõikides maades* 'in all the lands' (for a more detailed discussion see Saareste 1939, Kask 1970: 93–97). The rich biblical vocabulary is represented by Hebrew loans, e.g. *Jaana-lind* = *jaanalind* 'ostrich', *Peemot* 'hipopotamus; elephant; water monster', *Jaspe-kiwwi* = *jaspis* 'jasper', *Man* = *manna* 'manna' (Ariste 1981: 160–167). One can also find dialect words, such as *udris* = *kärmas* 'agile' and *öördama* = *peale kaebama* 'inform (on sb)' (Saareste 1939: 223–224) as well as various phraseological units and sayings (Krikmann 1996). The Estonian translation is closer to the original than Luther's translation of the Bible because Helle and other translators used original texts for his translation (Rannut 1989, Ross 1995). The publication of the complicated, many-sided, and authoritative *opus magnum* enriched and unified Written Estonian and enhanced its status. Similarly to the works by Stahl, the translation of the Bible became a normative text. The following generations of men of letters either supported or opposed it. A departure from the characteristic features of biblical language was now a sign of either carelessness or progressiveness. The language of the first Bible translation, which gradually became archaic, was sometimes imitated in literature (F. Tuglas, J. Peegel, A. Vihalemm and others) and acquired a stylistic value, the retention of which in the contemporary Bible translation has caused heated discussions (Paul 1999: 457–462). The 1739 complete Bible is a monument and landmark in the history of Written Estonian, which will provide research material for many years to come.

**Fourth period:**  
**extending the boundaries of the written language, working**  
**towards a common written language, attempts to reform spelling**

One could claim that the next period in the history of Written Estonian came to an end in 1857 when the Tallinn-language national epic *Kalevipoeg* 'Kalev's son' began to be published in Tartu and two newspapers in the Tallinn language came into existence in Livonia. One of the newspapers was published in Tartu, the other newspaper *Perno Postimees* 'Pärnu Courier', which had

readers all over Estonia, was published in Pärnu. The period under discussion is characterized first and foremost by a remarkable extension of the boundaries of the written language in terms of the number of publications, the domains where the language was used, and the number of writers and readers. The period 1715–1800 saw the publication of 348 books, 68 of them were in the Tartu language; between 1801 and 1850 altogether 803 books were published, 150 of them were in the Tartu language (Annus ed. 2000: 12–25). Until then the secular register had had an occasional character: there had been some occasional poetry (see Altkoa, Valmet 1973), public announcements, and rules. Now the secular reading matter that is directly intended for common people begins to grow in volume. The first Estonian ABC books are known to have existed already at the end of the 16<sup>th</sup> century, but the first reliable data about the existence of a primer date from 1641; the earliest extant primer dates from 1694 (Annus 1989: 558). In addition to the previously published ABD books (for a more detailed discussion see Annus 1989, Andresen 1993) and calendars (the first Estonian-language calendar was probably published in 1718 or a few years later, see Annus 1974), instructive and inspirational literature makes its appearance. The first books of this kind (EKA: 198–202) included *Se wagga Karjus*, Henning Kuse ‘The pious shepherd, Henning Kuse’ (1737) in the Tartu language by Johann Christian Quandt, a pastor from Urvaste, and *Hansu ja Mardi jutt* ‘The story of Hans and Mart’ (1739) by anonymous author(s) in the Tallinn language. 1782 saw the publication of bulkier didactic storybooks in the Tallinn language by Friedrich Gustav Arvelius, a man of letters, and Friedrich Wilhelm von Willmann, a pastor from Saaremaa. The 19<sup>th</sup> century witnesses the extension of both subjects and authors. In addition to the instructive reading matter, various Robinson Crusoe-style stories and sentimental stories describing sufferings and robbery gain popularity (for a more detailed discussion see Vinkel 1966). Non-fiction in such fields as health care, gardening, animal husbandry, cooking, vodka distillation, potato growing begins to be published. Three calendar series begin to appear since 1805 (EKA. 253). Readers look forward to the annual calendar especially because of the reading matter that appears as an appendix. The first bulkier folk school textbooks and popular-scientific books are published, written by Baltic German pastors. These books include, for example, the primer *ABD ehk luggemise-Ramat lastele* ‘ABD or a reading book for children’ (1795) by Otto Wilhelm Masing in the Tallinn language, the encyclopedic reader *Pühhapäwa Wahheluggemissed* ‘Sunday readings’ (1818), and the textbook of arithmetic *Arropiddamise ehk Arwamisse-Kunst* ‘The art of accounting or calculation’ (1806). A seminal reader *Weikenne oppetusse nink luggemisse Ramat* ‘A little learning and reading book’ (1805) by George Gottfried Marpurg was published in the Tartu language. The first

translation of the peasant law (1802) was published in the Tallinn language; translations of other laws followed suit.

The emergence of periodicals exerted a favourable influence on the development of the written language. It has been observed that the periodicals unified the previously scattered written language and allowed to experiment with different registers, which contributed to the development of fiction, ecclesiastical language, formal language, and media language. Both calendars and the first Estonian periodicals – *Lühhike õppetus* ‘A Short Teaching’ (1766–1761, published by Peter Ernst Wilde and August Wilhelm Hupel), *Marahwa Näddala-Leht* ‘Rural People’s Weekly’ (1821–1823 and 1825, published by Masing, in the Tallinn language) and *Tarto maa rahwa Näddali-Leht* ‘Rural People’s Weekly of Tartumaa’ (1806, published by Gustav Adolph Oldekop, Johann Philipp von Roth and others in the Tartu language) – provided an incentive for the rapid spread of the written language and information.

The population grew rapidly – from half a million people at the end of the 18<sup>th</sup> century to 750,000 in 1858. Over 90 per cent of the population lived in the country (Vahtre 1994: 100–101). Estimates of the literacy rate of Estonians in earlier times were made mostly on the basis of the number of printed copies and the population size; also the data about church visitations of schools and home learning were taken into account. Since the 18<sup>th</sup> century the literacy rate began to increase rapidly (Liivaku 1995: 39–43, 64–66). According to an estimate, in 1726 about 10 per cent of the peasants were literate (ENE: 344). The literacy rate was rather different in different regions, for example, 26.1% in Rõngu and 34.2% in Kodavere in 1775, 60% in Kambja in 1776, 72% in Tarvastu in 1786 (ENE: 344). The study of literacy among recruits showed that in the 1790s the literacy rate amounted to 40% in the province of Estonia, 55% in the continental part of Livonia, 62.3% in Saaremaa, and 70.9% in Tallinn (Aarma 1990: 222, 186). In the 1850s the average literacy rate in Estonia reached 70–80 per cent (Aarma 1990: 184–185). At that time literacy meant mostly the ability to read; there were few recruits who could write (5–10 per cent in the 1850s). The elementary rural people’s schools were officially required to teach writing in Livonia in 1851 and in Estonia as late as in 1867 (Aarma 1990: 227). The few second-level rural people’s schools (parish schools) had taught writing even earlier, and even a textbook of calligraphy had been published (Rosenplänter [1820]).

The literacy rate of rural people improved when the movement of Moravian awakening reached Estonia in the early 1730s. Because Orthodox Lutheranism opposed this movement at various times, Moravian awakening gave rise to an extensive manuscript culture (translations and their copies, letters, reports) and Estonian men of letters and preachers (EKA. 205–229). At the same

time Moravianism gave Estonians an opportunity for self-initiated common activity and paved way to social rise – the Moravians, who were literate and did not suffer from alcoholism, were willingly employed in various positions by manors.

The same period witnessed the emergence of original non-translated prose (*Ehstniche Originalblätter für Deutsche* 1816 by Masing). The ranks of educated men of letters were replenished by men who represented the Estonian identity and were not clergymen (Kristian Jaak Peterson, Friedrich Robert Faehlmann, Friedrich Reinhold Kreutzwald, Johann Voldemar Jannsen). Written Estonian expands both by subject areas and in terms of dialects and social background. On the one hand, it became closer to popular language, on the other, it became more international (the style and international vocabulary of new subject areas). Standardization was unable to keep pace with the expansion. The grammar and dictionary *Ehstnische Sprachlehre für beide Hauptdialekte* (1780, second and supplemented edition 1818) could codify only one part of the norm of the written language. Aspirations for ‘a more precise knowledge of Estonian’ were characteristic of the entire period (Laanekask 1992: 1172–1185).

There were close ties with the European Enlightenment because many young educated men from German universities arrived in the Baltic countries in search of work. It was only natural that a Baltic German intellectual was able to read French and German literature and subscribed to French and German newspapers and magazines. The fact that a German-language collection of works by J. J. Rousseau was published in Tallinn and works by Immanuel Kant and Johann Gottfried Herder were published in Riga in the 18<sup>th</sup> century is a sign that the Baltics belonged to the context of high culture of that time. Perhaps the best-known Enlightenment and Romanticist was Herder, who worked in Riga in 1764–1769. His works were rather popular here. The common people, whose immortal soul had been taken care of earlier as well, were as if re-discovered, and the nation’s past, and partly even the future, acquired a romantic glory. The efforts to develop Written Estonian were guided by the Herder-style mother tongue ideology, according to which language is a manifestation of the nation’s unique spirit and as such is worth studying and cultivation (Undusk 1995: 581–583, Jansen 2000: 1174–1176). The criticism of serfdom increased, and efforts were made to improve the economic system and to provide a more decent life for all the subjects including the enslaved Estonian peasant. The University of Tartu, which had stopped its activities during the Great Northern War, was re-opened in 1802 and contributed significantly to the spreading of modern ideas in Estonia and the Baltic provinces. This German-language university, originally intended for the Baltic provinces of Russia, attracted intellectuals from outstanding German uni-

versities, and gradually also young people with an Estonian background were admitted. Many of them were Germanized, but some of them remained true to their background due to national romanticist ideas and promoted the emerging national culture. Such disciples of the University of Tartu include, for example, Kristian Jaak Peterson, an extraordinary poet and man of letters, Friedrich Robert Faehlmann and Friedrich Reinhold Kreutzwald, both doctors, writers, and language scholars, and several others. However, Estophilia that was inspired by Enlightenment and Romanticist ideas spread among many Baltic German men of letters irrespective of their national background. One of the most outstanding manifestations of Estophilic enthusiasm was the German-language journal *Beiträge zur genauern Kenntniß der ehstnischen Sprache* (1–20, 1813–1832), published by Johann Heinrich Rosenplänter, a graduate of the University of Tartu and a pastor from Pärnu. Most of the Estophiles contributed articles to the journal about Estonian spelling, morphology, syntax, vocabulary, Written Estonian and dialects, Estonian history and prospects, Estonian prosody and folklore, reviews of literature, examples of Estonian texts, etc. Rosenplänter and his contributors were of the opinion that one could pick up the best usage from popular speech and not from abstract linguistic rules and the previous foreign-like written language. Examples from the cognate languages, such as Finnish and Livonian, replaced the previously used Latin or German examples. In addition to proving the legitimacy and potential of the Estonian language and culture, the journal focused on the possibilities and methods of establishing a common standard language. Rosenplänter (1814) was of the opinion that the Tallinn language should become the common standard because it covered a larger territory and number of speakers. In his view, the Tallinn language was richer and more regular. Dialects, Finnish, word derivation, archaisms and loanwords from foreign languages can enrich the common language. Rosenplänter's journal, however, published other opinions as well. Working towards a common standard was a multifaceted process in *Beiträge*. The search for the variety leading to the future common standard was combined with efforts to supplement the norms of the written language and to enhance the level and prestige of the language and its speakers (Laanekask 1983). The first Estonian learned societies represent the same kind of Estophilic ideology. Johann Wilhelm Ludwig von Luce founded the Kuressaare Estonian Society (*Arensburgische Ehstnische Gesellschaft*) in 1817, and in 1818 the Estonian Learned Society (*Ehstnische Gelehrte Gesellschaft zu Dorpat*) was set up as its branch in Tartu by the pastors of the Tartu-Võru deanery. However, the activities of the societies stopped by the 1830s (Siimo 1983: 443–445). The development of the standard language was later promoted by the Learned Estonian Society (*Gelehrte Estnische Gesellschaft*), established under the aegis of the

University of Tartu in 1838, and the Estonian Literary Society (*Estländische Literärische Gesellschaft*), founded in Tallinn in 1842. These societies had a much wider profile and their own scholarly publications.

The emancipation of Estonians as a nation was accelerated by peasant laws (1816 and 1819), which formally liberated Estonian and Livonian peasants from serfdom. However, the land remained the property of the lord of the manor, and one had to pay some rent for its use either in cash or by labour – the so-called *corvée*. Prosperity increased gradually, however. The additional peasant laws (Livonia in 1849, Eestimaa in 1856, and Saaremaa in 1865) helped to replace the *corvée* by money rent, and the 1850s witnessed the beginning of extensive purchase of farms for perpetuity, which continued in the next decades. The purchase of farms for perpetuity was most rapid in Livonia, which was the most prosperous and educated part of Estonia.

The decline of the Tartu language began during this period. On the one hand, the publication of Estonian-language books had become more and more a commercial undertaking from which some profit was expected. It was not economically viable to print books for the small south-eastern part of Estonia. For example, Hupel claimed in the foreword to his grammar that out of 124 Estonian parishes only 17 parishes in Tartumaa and Võrumaa used the Tartu language (Hupel 1818: [12]). Therefore, a common standard language was considered to be necessary (Laanekask 1984: 679). The European national ideology also supported the idea of a common standard language (Jansen 2000: 1174–1177). The following views emerged in the course of the language debates about the common standard language during the first half of the 19<sup>th</sup> century. First, the previous Tartu language will not be able to exist forever due to its small territory and morphological and lexical drawbacks. Second, the Tallinn language has some weaknesses, too, therefore the standard language should be a compromise between the two. Third, because the creation and establishment of such a language would be painstaking and time-consuming, the two standard languages should be retained for the time being. The pastors of Tartumaa and Võrumaa, who stressed the strengths of their written language, succeeded in retaining the use of the Tartu language in publications, school, and church (Laanekask 1992: 1192–1193). Yet the Tartu language became increasingly the language of ecclesiastical writings and disappeared gradually even from there while the secular domains became more and more topical for the language users. About 53.4 per cent of the books published in the first half of the 19<sup>th</sup> century had a religious character; during the second half of the century the percentage of religious publications dropped to 27.8 (Liivaku 1995: 98). The importance of the Tartu language is indicated by the fact that 150 books out of 803, known to have been published in the first half of the 19<sup>th</sup> century, were in the Tartu language (Annus ed. 2000: 25).

During this period it becomes clear that the spelling system needs to be reformed, and the first works are published using the new spelling system. In connection with the early stage of historical linguistics the Estonian language reformers realized the affinity between Estonian and Finnish (Laanekask 1988), and in language description and standardization they look for support from Finnish solutions. The previous spelling system did not always allow to distinguish a consonant in quantity 1 from those of quantities 2 and 3: *walli* may have stood for *vali* 'loud' (quantity 1), (*selle*) *valli* 'of this wall' (quantity 2), or (*seda või sellesse*) *valli* '(this or into this) wall' (quantity 3). As early as in 1822 the Finn Adolf Ivar Arwidsson published an article in *Beiträge*, where he highly recommends the adoption of a Finnish-style spelling system. Also Otto Wilhelm Masing, a pastor and a man of letters with an excellent command of Estonian and an adherent of Rosenplänter, tried to make the spelling more phonetic by means of diacritical marks. Of his numerous proposals the marking of *õ* was adopted. The letter *õ* was suggested by the composer Carl Michler from Tartu. On 14 July 1819 he recommended Masing to use the Greek circumflex over *o* (OWM: 120). Rosenplänter, the publisher of *Beiträge*, Friedrich Robert Faehlmann, a founder of the Learned Estonian Society, an authoritative linguist and literary scholar, and some other people suggested their own alternative spelling systems. Eduard Ahrens, a pastor from Kuusalu and a linguist, substantiated the suitability of a Finnish-style spelling system in his *Grammatik der Ehstnischen Sprache Revalschen Dialektes* (1843, the second edition with syntax in 1853). The first book that used the new spelling system was *Toomas Westen, Lapo rahwa uso ärataja Norra maal* 'Toomas Westen, missionary of the Lappish people in Norway' (1844) by Gustav Heinrich Schüdlöffel, a pastor from Jõelähtme, a neighbouring parish of Kuusalu. Friedrich Reinhold Kreutzwald, the most authoritative man of letters of this period and the creator of the Estonian national epic, became a convinced supporter of the new spelling system at the beginning of the 1850s. His views were influenced by the Finn Anders Johan Sjögren, a member of St. Petersburg Academy (for a more detailed discussion see Kask 1958: 22–83, Tomingas 1979, Alvre 1993: 201–202, Raag 1999a: 61–65).

During the next period the old spelling became a sign of conservatism, and the new spelling system won.

**Fifth period:  
decline of the Tartu language, success of the new spelling system,  
Written Estonian gains some prestige**

The next development stage of Written Estonian could provisionally cover 1857–1905. For Estonian history this period was of extremely great significance when the previous class distinctions disappeared, and pre-conditions for a democratic civil society and the creation of the Estonian nation state were created. This process took the form of national awakening and consolidation as well as economic and social progress. The previous natural economy declined, trade and money relations broke through, Estonians were buying farms in perpetuity from the landlords, and towns and industry grew rapidly. Russification towards the end of this period could not put an end to the national independence of Estonians and the increased prestige of the Estonian language in the collective consciousness of Estonians.

Two important efforts characterize this period – first, an effort to establish a common and standardized written language and, second, the effort to gain a higher status for the Estonian language. The latter implied the use of educated and ‘correct’ Estonian in every walk of life in place of or at least alongside German (and Russian) in every walk of life. For example, Karl August Hermann, a versatile linguist and a man of letters, wrote that first and foremost schoolteachers, clergymen, court officials, parish clerks, writers, parents, and all educated Estonians should use correct written language (Hermann 1884a). Neither effort was fully successful in this period. However, the Estonian language and especially standard Written Estonian became an important sign of the rising nation. It would be difficult to find an Estonian celebrity of the national awakening period and the period that followed, who was not active in standardizing the Estonian language. The Baltic Germans as creators of Estonian texts and language developers were left on the sidelines; educated Estonians took the centre stage (Hennoste 1997: 55). The end of the period and the beginning of a new period is marked by the publication of the first collection of Young Estonia, a cultural group of young educated Estonians. It was published in the year of great social upheaval, the 1905 Russian Revolution. This collection included an important article by Johannes Aavik, an outstanding language reformer. The article was entitled “About the measures of supplementing Standard Estonian”, and it opened a new stage of forced enrichment and planning of Standard Estonian. Aavik (1905) drew up a programme for the development of Estonian and declared that the Estonian language and literature would have to become a language and literature of the intelligentsia.

The second half of the 19<sup>th</sup> century witnessed the decline of the Tartu language and the old spelling system. At the beginning of the 19<sup>th</sup> century about forty per cent of Estonian-language publications used the South Estonian written language. However, by the middle of the century the proportion of publications in the Tartu language amounted to only fifteen per cent, towards the end of the 1860s it was five per cent, and the proportion showed a further downward trend (Kask 1970: 186, 190). It is typical that Jakob Hurt, a South Estonian luminary, a pastor and linguist from Põlva, a leading figure of the national movement, and a later organizer of a campaign to collect Estonian folk poetry, called on his countrymen in 1865 to use the 'Tallinn dialect' as the book language. He emphasized that it is customary for any nation to use a single written language that unites people (Laanekask 1992: 1193). At first a seminary that started work in Tartu in 1873 with the aim of training parish school teachers for Livonia used both the languages of Tallinn and Tartu as the languages of tuition, but after a few years the Tartu language was abandoned (Sirk 1984). On the other hand, it is known that even in the beginning of the 20<sup>th</sup> century some parents in Põlva parish refused to buy school-books in the Tallinn language. The dean had demanded that books in the Tartu language should be used for the teaching of religion (Liivaku 1995: 81–82).

The literacy rate improved and the reading matter became more versatile. In 1897 about 96 per cent of Estonians could read (Liivaku 1995: 86). Since the middle of the century the number of book titles doubled after each 10–20 years; in 1851 – 40, 1865 – 81, 1890 – 186, and 1901 – 444. Altogether 1,371 book titles were published between 1851 and 1875; in 1876–1900 there were 4,683 different books, in 1901–1917, however, 8,673 books (Liivaku 1995: 88). The number of Estonian-language newspapers showed an increase as well. In 1860–1870 there were 4 of them, in 1880 – 9, in 1890 – 11, in 1900 – 12, and in 1905 – 22 (Liivaku 1995: 109). The first Estonian-language daily *Postimees* 'Courier' began publication in Tartu in 1891. The existence of home libraries and the emergence of public libraries shows that people were interested in reading. The second half of the 19<sup>th</sup> century saw the establishment of 153 public libraries (Jansen 1993: 346).

The use of Written Estonian expanded. One could witness the appearance of works of fiction for a more sophisticated artistic taste. The language of authors affected the norms of Written Estonian (Friedrich Reinhold Kreutzwald, Lydia Koidula, Andres Saal, Eduard Bornhöhe, Eduard Vilde, August Kitzberg, and others). Gradually a distinction could be made in fiction between the author's speech and the character's speech; the characters were now marked by their language use. Estonian-language textbooks made their appearance, for example, in physics (1855, see Liivaku 1995: 103), agronomy

(Jakobson 1869), Estonian phonetics (Weske 1879), and Estonian grammar (Hermann 1884a). Karl August Hermann made an attempt to publish an encyclopedia. It was published in fascicles; the bulky volume A appeared in 1900–1904, and in 1906 one fascicle of volume B was published (Liivaku 1995: 104). Many parish schools introduced Estonian as the language of tuition; also municipalities and Estonian societies began to use Estonian, though with some restrictions. Estonian was taught as a subject at teachers' seminars and the University of Tartu. On stage the local German theatre companies sometimes experimented with Estonian-language interludes to entertain the audience – historical records mention such activities at the end of the 18<sup>th</sup> century (EKA. 322–324). There is a tradition to regard the performance of the comedy *Saaremaa onupoeg* 'A cousin from Saaremaa' by Koidula at the Vanemuine Society in 1870 as the beginning of the Estonian national theatre (Põldmäe 1978). The Estonian-language theatre must have been rather popular because by 1908 the Russian Drama Archive had 1,332 Estonian-language plays (Liivaku 1995: 105).

The spoken language norm still revealed many more dialect features than the written language. Ferdinand Johann Wiedemann, an outstanding Finno-Ugric scholar and member of the St. Petersburg Academy of Sciences, shared this view as well. He wrote in the preface to his 700-page work *Grammatik der ehstnischen Sprache* that an Estonian understands fully only his or her local dialect, but there was no generally accepted and used form of language as yet (Wiedemann 1875: III).

Estonians constituted a closely-knit speech community because information spread faster and people became increasingly mobile. The previous self-designation *maarahvas* 'people of the land' (earlier also *Tartu-ma rahvas* 'people of Tartumaa' and *Tallinna-ma rahvas* 'people of Tallinnamaa') was replaced by the new self-designations *eesti rahvas* 'Estonian people' and *eestlane* 'Estonian' (Ariste 1956, Grünthal 1997: 215). Estonians called upon other Estonians to remain Estonians. Johann Voldemar Jannsen, a popular writer and journalist, moved from Pärnu to Tartu at the end of 1863 and began to publish the weekly newspaper *Eesti Postimees* 'Estonian Courier' in place of his previous newspaper *Perno Postimees* 'Pärnu Courier'. In order to introduce himself to the readership of the new newspaper, he sent his portrait to the subscribers. He looked like a respectable gentleman. The caption, however, read as follows: *Eestimees! Jä iggas rides ja igga nimme al Eestimehheks, siis olled aus mees omma rahwa ees* 'Estonian man! May you remain an Estonian man in any clothing and under any name, then you'll be an honest man for your people'

During this period walks of life, property, and principles stratified the Estonian speech community. Estonian politics was now done in Estonian,

and the existing varieties of written language acquired a party flavour. The more radical wing of nationalism, headed by Carl Robert Jakobson, a man of letters and a public figure, was profoundly opposed to the Baltic German nobility and clergy. Both the dialects (also the Tartu language and the western features in the biblical translation) and the old spelling system were now regarded as signs of ignorance or conservatism and loyalty to Germans and pastors.

At first few people supported the new Finnish-style spelling system. One of them was the highly respected Kreutzwald, who repeatedly ridiculed the old spelling system and stood up for the new one (Kask 1958: 88 ff.). For example, his popular book *Kilplased* (describing stupidity in the manner of the wise men of Gotham) ridiculed the western dialect as used by Jannsen and the old spelling system. The old spelling system was still used in most school textbooks, religious literature, and popular books and newspapers. Schoolmasters met with resistance the publication of a slim volume by Hurt *Lühikene õpetus õigest kirjutamisest parandatud wiisi* 'A brief guide to correct writing in a new way', published in 1864 by the Learned Estonian Society (Kask 1958: 123 ff.). The success of the new spelling system was actually determined by the popular school textbooks by Jakobson (*Uus Aabitsaraamat* 'A new ABC book' 1867, *Kooli Lugemise raamat* 'A school reader' I–III, 1867–1876) and the support of the younger generation of schoolmasters (Kask 1958: 146–157, Tomingas 1979: 740). While in 1869 only a fifth of the Estonian-language books used the new spelling system (Kask 1958: 161), in 1872–1874 about half of the new books, in 1875 about three quarters, and in 1879–1880 about 90 per cent used the new spelling system (Kask 1958: 177, 192). The declining Tartu language continued to use the old spelling system; the new spelling system became characteristic of the general North Estonian language (Kask 1970: 188). The weekly newspaper *Eesti Postimees* 'Estonian Courier', the voice of the national movement and published by Jannsen, adopted the new spelling system only after the Estonian Society of Literati in 1872 began to officially support the new spelling system after its first official meeting (Kask 1958: 170–171).

The primary task of the Estonian Society of Literati was to publish Estonian-language books and to educate and unify Written Estonian. It was the first time when the Estonian men of letters began to develop the written language on a systematic basis. Some authors have even regarded the year 1872 as the beginning of language planning. However, language planning is an earlier phenomenon.

In the new situation Written Estonian had too many varieties. First, some variation was due to the co-existence of two spelling systems. Nor were all the details of the new spelling system established. Second, various dialectal

features flooded the written language because many ethnic Estonians began to write in Estonian during this period. In a situation where the authority of the Bible was on the decline and there were no authoritative normative grammars and dictionaries, the men of letters did not follow the existing tradition of Written Estonian as closely as before and rather relied on their own variety. For example, the following western features (also known from the Biblical language) occur in the language of Jannsen and his daughter Lydia Koidula, a beloved patriotic poet, who came from the western dialect area: disappearance of *v* (*sui* = *suvi* 'summer', *palla* = *palav* 'hot'), substitution of *e* for *i* (*penk* = *pink* 'bench', *linnudke* = *linnudki* 'even birds', *priskeste* = *priskesti* 'well'), strong-grade inessive (*lautas* = *laudas* 'in the cowshed'), weak-grade *de*-plural (*õlladega* = *õlgadega* 'with shoulders'), strong-grade present 3<sup>rd</sup> person plural (*weddawad* = *veavad* 'they haul'), past participle without *-ta-* (*kirjutud* = *kirjutatud* 'written'), strong-grade *da*-infinitive (*lendada* = *lennata* 'to fly'), simple past 3<sup>rd</sup> person plural without *-va-* (*ollid* 'they were', *tahtsid* 'they wanted'; for a more detailed discussion see Kask 1984: 132–135). The writer Kreutzwald, who came from western Virumaa, used many *si*-final partitive plural forms (*metsasi* = *metsi* 'forests', *jõgesi* = *jõgesid* 'rivers'), weak-grade inessive (*lukus* 'locked', *kohas* 'in a place'), *i*-plural alongside *de*-plural (*päevil* = *päevadel* 'on days', *paelust* = *paeltest* 'from strings'), strong-grade western present forms as in the previous written language (*andwad* = *annavad* 'they give', *kiitwad* = *kiidavad* 'they praise') and *id*-final weak-grade present forms that are characteristic of the central dialect (*seisawad* 'they stand'), *id*-final past 3<sup>rd</sup> person plural forms representing the previous written language (*hüüdsid* 'they shouted', *hakkasid* 'they began') alongside dialect forms (*hakkasiwad* 'they began', *paniwad* = *panid* 'they put'; Kask 1984: 126–132). The language of Jakobson, who came from the eastern dialect area reveals *d* in the weak grade (*kuduwad* = *koovad* 'they knit', *wedad* = *vead* 'you haul'), the *si*-final partitive plural is rather common (*kirjasi* = *kirju* 'letters', *seesugusi* = *seesuguseid* 'such'), so are the weak-grade present forms that are especially common in the eastern dialect (*jõuawad* 'they arrive', *kannawad* 'they carry'), *va*-final imperfect forms (*oliwad* = *olid* 'they were', *saaksiwad* = *saaksid* 'they would get') and even *ei* *wõinuwad* = *nad ei võinud* 'they couldn't', and the *tatud-*, *tatakse*-forms of the impersonal mood (*nimetatakse* 'is named', *imetatud* 'suckled'; Kask 1984: 136–139).

The linguist and poet Mihkel Veske, who came from Paistu in South Estonia, thought that Written Estonian should be based on the North Estonian central dialect and that the spelling system should be as phonetic as possible. Therefore, he recommended and used forms that were rather different from the previous written language (*kieel* = *keel* 'language', *muoodi* = *moodi* 'like',

*murred* = *murded* 'dialects', *pian* = *pean* 'I must', *tuad* = *toad* 'rooms', *selsi* = *seltsi* 'society', *poegana* = *pojana* 'as a son'; Kask 1984: 146–152). Hermann, a linguist and a man of letters from Põltsamaa parish in Central Estonia, supported and used forms with long vowels (*pääl* = *peal* 'on', *sääl* = *seal* 'there', *keel* 'language', *rõõm* 'joy') and qualitative-gradational forms with lowered vowels (*pean* 'I must', *toad* 'rooms', *näod* 'faces'). He was of the opinion that in words of the *keel*-type, the *de*-illative, which was common in eastern and southern dialects (including his home sub-dialect), should be used (*meelde* 'into memory', *juurde* 'to', *äärde* 'to the side'). Hermann recommended the use of *va*-forms in the simple past third person plural (*palusiwad* = *palusid* 'they asked') and *-tatakse*, *-tatud* in the impersonal (Kask 1984: 157–160).

Third, the number of variants increased because the Tartu language was on the decline. The emerging common language absorbed southern features from the works of writers who came from South Estonia. For example, J. Hurt used *va*-forms in the simple past and the conditional mood and *tatud*- and *tatakse*-forms in the impersonal after the example of eastern and southern dialects. Hurt recommended to use *-o-* in the non-initial syllable (*asjost* = *asjadest* 'of things') and *-ää-* in place of *-ea-* (*hää* = *hea* 'good', *sääl* = *seal* 'there'), which were characteristic of his home dialect (Kask 1984: 141–146).

Different theoretical views served as an additional factor in the remarkable variation of the written language. Veske, Hermann, and Hurt were doctors of linguistics. Veske received his doctorate from Leipzig in 1872, Hermann also from Leipzig in 1880, and Hurt from Helsinki in 1886. They looked for support to their views from language history and Finnish. It was difficult to reach consensus because of different political views. The views on language were often attributed to one or another political camp. For example, Jakobson and Veske belonged to the more radical wing of the national movement, Hurt and Hermann, on the other hand, sided with the more moderate wing. Many of the above-mentioned forms remained topics of discussion for a long time and became stable only during the next period of the development of the written language.

At first even the works by the highly respected linguist Ferdinand Johann Wiedemann (Estonian-German Dictionary 1869, An Estonian Grammar 1875) were unable to put an end to the confusion regarding the written language. Wiedemann's works are not prescriptive but describe the contemporary state of the language. His works, however, were important from the theoretical point of view, and one can claim that, for example, the rapid absorption of South Estonian vocabulary by the written language can at least partly be attributed to the role of Wiedemann's dictionary. A new and supplemented

edition of this bulky dictionary was published in 1893, edited by Hurt. Wiedemann published another important theoretical article in the proceedings of the Learned Estonian Society (Wiedemann 1873), where he emphasized the significance of a common well-planned language for a rising nation and provided recommendations for its enrichment and unification (Saari 1979: 661–666).

Members of the Estonian Society of Literati made a number of attempts to unify the written language, and heated debates were held in the newspapers (see Kask 1970: 288–333, Kasik 1999: 85–96). While preparing a new edition of the New Testament in the new spelling system, Hurt, a member of the board, published an article (Hurt 1886), where he explained which choices had to be made from among the existing variants (Raag 1999a: 67–70). The quantity 2 and quantity 3 speech sounds were not distinguished (*murded* pro *murred* ‘dialects’), they wrote *au* ‘honour’ and *nõu* ‘advice’ (not *auu* and *nõuu*), *hüüu* ‘of shout’ and *luua* ‘to create’ (not *hüü* and *lua*), *vea* ‘of a mistake’ and *loa* ‘of permission’ (not *via* and *lua*), *hea* ‘good’ and *pea* ‘head’ (not *hää* and *pää*), *nüüd* ‘now’ and *rõõm* ‘joy’ (pro *nüid* and *rõem*), *tamm* ‘oak’ and *kepp* ‘stick’ (pro *tam* and *kep*), *mul* ‘I (adessive)’, *sel* ‘this (adessive)’ and *jah* (pro *mull*, *sell*, *jahh*), *kottki* ‘even a bag’ and *tammgi* ‘even an oak’ (pro *kottgi*, *tammki*), *Jumal* ‘God’ and *Issand* ‘Lord’ (pro *jumal*, *issand*), *teine* ‘other’ and *lõikama* ‘to cut’ (pro *tõine*, *leikama*), *kõik* ‘all’ and *sõna* ‘word’ (pro *keik*, *sana*), *saja* ‘of a hundred’ and *sõja* ‘of war’ (pro *saa*, *sõa*). The following forms were written differently from the later norm: *kiireste* = *kiiresti* ‘quickly’, *ammet* = *amet* ‘occupation’, *ommeti* = *ometi* ‘in fact’, *senni* = *seni* ‘so far’, *kunni* = *kuni* ‘until’, *tallitama* = *talitama* ‘tend’, *meele* = *meelde* ‘into the mind’, *meresse* = *merre* ‘into the sea’, *hädasse* = *hätta* ‘into trouble’. A New Testament in the new spelling system was published in 1888, the complete Bible appeared in 1889 (Paul 1999: 591–593). Estonians needed stable and logical norms and ‘correct language’. Therefore, the public at large took a great interest in such normative treatments as *Kirjutamise õpetus* ‘A guide to writing’ (1882) by Juhan Kurrik, an article by the same author *Üleüldiselt pruugitav kirjaviis* ‘A universal spelling system’ (published in all the Estonian-language newspapers in 1886), “*Kündja*”, *Eesti keeleõpetus, nenda kui Eestikeelt Kesk-Eestimaal räägitakse* “‘Ploughman’”, a guide to Estonian, how Estonian is spoken in Central Estonia’ (1884) by J. Nebocat, and *Lühike eesti keele õpetus* ‘A short guide to Estonian’ (1885) by H. Einer.

A normative grammar *Eesti keele Grammatik* ‘An Estonian grammar’ (1884) by Hermann is the first language book written in the Estonian language. It was harshly criticized after publication, but in retrospect one can say that it became an authoritative source (Kask 1970: 288–308). Some norms

established by Hermann are still valid, for example, the long-vowel variants of *hää* 'voice', *nüüd* 'now', *rääkima* 'to speak', *rõõm* 'joy', *süü* 'guilt', *võõras* 'strange' (pro *heal*, *nüid*, *reakima*, *rõem*, *süi*, *võeras*), a lowered vowel in the weak grade of qualitative-gradational words (*tuba* : *toa* 'room : of a room', *viga* : *vea* 'mistake : of a mistake', *süsi* : *sõe* 'coal : of coal', *magu* : *mao* 'stomach : of a stomach'; not *tuba* : *tua* etc.), *de*-illative (*keelde* 'into the tongue', *juurde* 'to' pro *kee*, *juure*), *le*-allative also after a syllable with a secondary stress (*jalgadele* 'on feet' pro *jalgadel*), weak-grade essive (*pojana* 'as a son' pro *poegana*), shorter genitive forms of *tu*-caritives and ordinal numerals (*õnnetu* 'unhappy', *kolmanda* 'of the third' pro *õnnetuma*, *kolmandama*), *sid*- and vowel plural partitive (*jalgu* ~ *jalgasid* 'feet' pro *jalgasi*), regular impersonal forms (*kirjutatakse* 'is written', *kirjutatud* 'written' pro *kirjutakse*, *kirjutud*), *i*-final adverb suffixes (*armsasti* 'nicely', *ajuti* 'from time to time', *põlvili* 'on one's knees' pro *armsaste* etc.).

One should also point out that many Estonian-language grammar terms were invented by Hermann (e.g. *nimetav* 'nominative', *omastav* 'genitive', *osastav* 'partitive', and other names of cases, *häälik* 'speech sound', *ainsus* 'singular', *mitmus* 'plural', *kääne* 'case', *pööre* 'person'). It is likely that a number of norms suggested by Hermann may have become established in the language because they reflected the usage of 'central periphery' on the border between North and South Estonian (for a more detailed discussion see Pajusalu 1997). Another contributing factor was that some influential opponents, for example, Veske and Hurt, did not take part in the language debate. However, at the turn of the century the written language was still unstable and rich in variants (see Ahven 1958: 12–31, Kask 1984: 170–179).

The vocabulary was renewed to a remarkable degree. In addition to words from popular speech, many specialized terms and cultural words would make their appearance. They included translation loans, native words, and foreign words (e.g. Kreutzwald: *organ* 'organ', *reuma* 'rheumatism', *mädanik* 'rot', *põletik* 'inflammation', *palavik* 'fever', *süsinik* 'carbon', *vesinik* 'hydrogen', *hapnik* 'oxygen', *möödanik* 'the past', *tulevik* 'the future', *kristlane* 'Christian', *kuninganna* 'queen', *laviin* 'avalanche', *reegel* 'rule', *täheldama* 'notice', *rahvus* 'nationality', *voorus* 'virtue', *omadus* 'characteristic'; Hurt: *alaealine* 'minor', *laevastik* 'fleet', *sõnastik* 'dictionary'; Jannsen: *raudtee* 'railway', *krediitkassa* 'credit union', *parlament* 'parliament', *partei* 'party', *poliitika* 'politics', *president* 'president', *dollar* 'dollar'; Jakobson: *avaus* 'opening', *kiltkivi* 'shale', *ollus* 'matter', *vurle* 'city slicker'; Hermann: *helilooja* 'composer', *heliredel* 'scale', *avamäng* 'overture', *kääne* 'case', *häälik* 'speech sound', *peenendus* 'palatalization', *rõhk* 'stress', *tähestik* 'alphabet', *sisseütlev* 'illative', *seesütlev* 'inessive', *seestütlev* 'elative'; Grenzstein: *male* 'chess', *malend* 'chessman', *maletama* 'to play chess', *näidend* 'play', *kirjand*

'composition', *naljand* 'humorous legend'). One can also notice purist tendencies (for a more detailed discussion see Raag 1999a: 95–102). Estonians preferred native derivatives and words and morphological forms that are closer to the original forms from the point of view of language history. Some recommendations met with success; others were abandoned and sound humorous now. Hermann, for example, recommended to use the native word *ahing* 'fish spear' instead of the loanword *kahvel* 'fork' and the derivative *osklane* 'specialist' (derived from the verb *oskama* 'to know how to do') instead of *spetsialist* 'specialist' (Ahven 1958: 10).

The bulky Estonian-German dictionary (*Ehstnisch-deutsches Wörterbuch*, 1869) by Wiedemann was unsuitable for everyday use because of its scientific transcription and descriptive approach. However, a number of explanatory and bilingual dictionaries were published, which contributed to the clarity of the lexical norm and reinforced the latter. The attempt by Hermann to publish an encyclopedia was mentioned above. *Eesti Sõnaraamat* 'A dictionary of Estonian' (1884) by Ado Grenzstein presented 1,649 new and foreign words that were provided with explanations and divided into four groups on the basis of their desirability and acceptance. *Vene-Eesti Sõna-Raamat* 'A Russian-Estonian dictionary' (1885) by J. Johanson-Pärna was a popular dictionary that provided Estonian equivalents for about 16,000 entries. Five editions of this dictionary were published until 1917. There was also *Eesti-Vene sõnaraamat Wiedemanni järele* 'An Estonian-Russian dictionary according to Wiedemann' (1890) compiled by three persons (about 25,000 entries). The growing vocabulary of politics is covered by *Ajalehelugeja Sõnaraamat* 'A dictionary of newspaper language' (1903), published by the Tallinn newspaper *Uus Aeg* 'New Times'. *Tarvilik Saksa-Eesti sõnaraamat* 'A German-Estonian dictionary' (1902) by J. Ploompuu and N. Kann provides Estonian equivalents for 35,000 entries.

The described processes enhance the social status of Estonian and especially the status of written language. In order to improve the status of the Estonian language, people demanded greater rights for the Estonian language at public institutions, an increased number of mother tongue lessons, the replacement of dialect language by common language in the schools of the Võru deanery, the teaching of the Estonian language at secondary schools, and the establishment of a professorship at the University of Tartu (see Ahven 1958: 31, Raag 1999a: 54–59). Towards the end of the period the status of the Estonian language rose to such a degree that educated Estonians, whose home language had so far been German and later occasionally Russian, started to speak Estonian at their homes. The people with divided language loyalties were now ridiculed as *kadakasakslased* 'Germanized Estonians' and *pajuvenelased* 'Russianized Estonians' (Liivaku 1995: 82, Hennoste 1997: 56–58,

Paul 1999: 66–73, Raag 1999a: 54–59). Towards the end of the century it was common practice that job advertisements in newspapers often required the knowledge of the three local languages (Estonian, German, and Russian) (Jansen, Saari 1999: 240). However, tertiary education was still provided only in German. During the next Russification period Russian served as the language of instruction.

The Russification of indigenous peoples, which was officially launched by the Russian central power in 1885, backfired on the status of the Estonian language. One acrolect (German) was forcefully replaced by another – Russian. The so-called Alexander School (worked in Kaarlimõisa near Põltsamaa in 1888–1906) that had been devised to provide an Estonian-language junior secondary education as part of the national movement was replaced by Russian-language education. The Estonian language could be taught only in the first two forms of rural primary schools (even there Russian was to be used officially since 1892). In town schools and elsewhere Estonian was used only in classes of Estonian and religion. Russian was used in courts (with the exception of lower courts) and in local municipalities. Many Russian teachers and officials arrived in Estonia, and local place names were replaced by Russian ones (e.g. *Tartu* > *Jurjev*, *Triigi vald* > *Aleksandri vald*). Russification dealt a blow to the radical wing of the Estonian national movement, whose national aspirations were opposed to the Baltic Germans and who had looked for support from the Russian government and the Slavophile newspapers in St. Petersburg and Moscow. The Estonian Society of Literati was plagued by infighting and slander and was dissolved by the government in 1893. The Estonian-language printed word, however, was not banned, as it happened to the mother tongue publications of Lithuanian and Latvian Catholics, and its scope increased. Many German professors were forced to leave Tartu University. In 1889 the percentage of German professors in Tartu amounted to 86.9; in 1900 only 19.4 per cent were Germans, and 75.5 per cent of the professors were Russians. Hermann, who became a lecturer in Estonian at the university in 1889, had to use Russian as the language of instruction (in place of German as had been the previous tradition). Russian loans found their way into Estonian, e.g. *trastu* = *tere* ‘hello’, *prassai* = *head aega* ‘good-bye’, *guläitama* = *jalutama* ‘walk’, *kultuura* = *kultuur* ‘culture’, *sisteema* = *süsteem* ‘system’, *tirann* = *türann* ‘tyrant’ (for a more detailed discussion see Vahtre 1994: 111–121, Selirand, Siilivask 1996: 268–275, 280–283, Raag 1999a: 74–80). However, one has to emphasize that in the eyes of most Estonians the mother tongue preserved its high prestige, and Written Estonian retained its positions in fiction, journalism, and religion. The Estonian language was used on stage and in the social sphere (agricultural societies, collecting of folk poetry, choirs, libraries, drama circles, temperance and

firefighting societies, dairy and credit unions, etc.). One should also point out the massive collection of folk poetry launched by J. Hurt in 1888. Over 1,400 correspondents all over Estonia and from many Estonian settlements outside Estonia participated in this campaign. When Hurt died in 1907, over 100,000 pages of folk poetry had been collected. Hurt had already started the academic publication of these collections as if a sign of combining the ancient oral culture with the new written culture.

The trump card of Estonians was their numerical superiority in Estonia. According to the 1881 census of the Baltic provinces, 94.4 per cent of a population of 890,000 had indicated Estonian as their mother tongue. 54.9 per cent town dwellers were native speakers of Estonian (Vahtre 1994: 111). The 1897 All-Russian census showed that about 90.6 per cent of the population of 980,000 people were Estonians (about 890,000), Russians constituted 3.9 per cent and Germans 3.5 per cent. In addition, 120,000 Estonians lived outside Estonia (about 57,000 in the St. Petersburg province and over 25,000 in the Petseri province (cf. Vahtre 1994: 117). Thus, slightly over one million Estonians had settled in the Russian Empire. The demographic indicators were, naturally, not the only reason why Estonians had continued to exist and to make progress as a nation by the beginning of the 20<sup>th</sup> century. The disappearance of class distinctions and the emergence of nationalities were a central process in the 18<sup>th</sup> and 19<sup>th</sup> century Europe. Estonians succeeded in joining this process (for a more detailed discussion see Jansen 1993: 351–352, Jansen 2000). In the years 1881–1897 the proportion of Estonian civil servants grew from 5 to 52 per cent (Selirand, Siilivask 1996: 271). In rural areas the lower-level municipalities had been placed in the care of Estonians by the 1866 Municipalities Act (Laur *et al.* 1997: 8–9); towns reached the same situation at the beginning of the 20<sup>th</sup> century. In 1901 Estonians and Latvians won the town elections in Valga, and Valga got an Estonian mayor. In 1902 Jaan Tõnisson, an Estonian journalist and public figure, was elected to the Tartu municipal council. He later became a leading Estonian politician and statesman. In 1904 the Estonian-Russian bloc wins the town elections in Tallinn, thus ousting the Baltic Germans from power. Konstantin Päts, another outstanding Estonian statesman, became the deputy mayor (Vahtre 1994: 118–121). Thus, interestingly enough, the Russification period eroded the social hierarchy and considerably weakened the positions of the German language. When Russification gave way after the 1905 Revolution, it was much easier than ever before to rest on the Estonian identity and language (see also Hennoste 1997: 57–60, Jansen, Ruutsoo 1999: 540–550).

Four centuries of the history of Written Estonian from the 16<sup>th</sup> century to the beginning of the 20<sup>th</sup> century show how two small monofunctional written languages with a remarkable number of varieties, which came into exist-

ence through the support of foreign languages and on the basis of ancient Estonian dialects, developed into one polyfunctional written language. By the end of the period under discussion it had become an important part of the Estonian national identity and an important tool of communication for the Estonian speech community. However, the true development of this tool of communication for the purpose of science, government, and education was yet to begin.

**Sixth period:  
seeking the nation state, expansion of domains of use,  
language reform, increased authority of the norm**

The next period in the development of Standard Estonian covers the years 1905–1918. This period of revolutions and wars brought along rapid changes in the status of the language community and the written language. During the 1905 Revolution Estonians, who had previously pursued common activities (societies, choirs, circles, cooperatives), joined political parties and trade unions. The working class and student movements grew stronger. Establishment of an independent democratic republic was the most radical political claim. The years 1905–1908 witnessed violence from the Russian authorities, which further clarified the political ends. The number of Estonians with a higher education increased, reaching about one thousand by World War I (Selirand, Siilivask 1996: 334). The first generation of professional musicians, artists, and actors emerged in Estonian national culture. The two first decades of the century saw an expansion of joint economic activity and higher prosperity; the Estonian capital was now able to finance large-scale joint projects.

The establishment of the foundations of the Estonian-language educational system was especially important for the standard language. In 1906–1913 and from 1915 onwards mother-language instruction was once again allowed in the Baltic countries during the first school years. In 1906 the Tsarist government gave the private schools permission to organize teaching also in Estonian, Latvian, or German (Vahtre 1994: 125). Estonian educational societies made ample use of this opportunity already during the following years (for a more detailed discussion see Vahtre 1994, Kinkar 1996). The first terminological committees were set up; at first their purpose was to systematize and create specialized terminology at least on the level of secondary education. Their work bore fruit in the form of specialized dictionaries for schools in mathematics, geography, chemistry, physics, and others (Kask 1938, Kull 2000: 53–55).

The new kinds of joint activities and mother-tongue instruction made the Estonian language more prestigious but also revealed a conflict between the new requirements and the peasant language. On the other hand, it revealed a conflict between the new requirements and the homespun language of the Estonian peasantry. Writers were the first to demand a radical improvement of the language in line with the new requirements. This period witnessed the emergence of a new generation of language-conscious young writers, who by 1905 formed the Young Estonia group. The time was ripe; the language reform needed a leader, and Johannes Aavik (1880–1973) assumed this role.

Aavik was a philologist to the core, not an Estonian philologist but a Romance and Finnish scholar. One should point out, however, that at that time it was not possible to become an Estonian philologist because there was no professorship of Estonian at the University of Tartu. He enjoyed the peculiarities, worth, and beauty of Latin, French, German, English, and Russian, which inspired a dream to develop Estonian into a language that would be as rich as the traditional cultural languages. Like all the other educated Estonians of the end of the 19<sup>th</sup> and the beginning of the 20<sup>th</sup> century, he was greatly inspired by Finland. In 1911 he devised a plan for a radical language reform that covered grammar in addition to vocabulary. In the same year the linguist and poet Villem Grünthal-Ridala published a programmatic article about the development of Standard Estonian (Grünthal 1911). Both of them were members of Young Estonia, which proclaimed that “let us be Estonians, but let us become Europeans, too!” The first collection of this group, published in 1905, contained a ground-breaking essay by Aavik *Eesti kirjakeele täiendamise abinõuudest* ‘About some measures for supplementing Standard Estonian’ (Aavik 1905).

Aavik formulated the foundations of his theory in his main work *Keele-uuenduse äärmised võimalused* ‘Extreme possibilities of the language reform’ (Aavik 1924a, written in 1914–1918): language should be regarded not only as a product of a single nation whose spirit is manifested in it and who therefore regards it as valuable property and a national treasure, but language should first and foremost be seen as a measure, tool, machine of human activity; therefore one should look at it “with the eyes of an industrial person, engineer, technician, who tries to shape and use phenomena to his own advantage, to his own ends” (Aavik 1924a: 8–9). Such a view on language by Aavik was not unprecedented in European linguistics. A number of linguists have claimed that language is a tool, and a human being is not only entitled but has a social duty to improve its tools and even replace the existing tools by better ones.

The adoption of such views enabled Aavik to develop an instrumentalist theory of improving language by means of all the devices including the arti-

ficial ones. His book *Õigekeelsuse ja keeleuuenduse põhimõtted* 'The principles of correct usage and language reform' (Aavik 1924b) presents the principles of purposefulness, beauty, and peculiarity. Purposefulness was a generally accepted principle in Estonian language planning, but each linguist attributed a different meaning to it. According to Aavik, purposefulness was first and foremost the richness of both vocabulary and grammatical categories and only then clarity, precision, shortness, and the ease of learning its rules.

In theory the aesthetic principle stood in the second place, but in practice it occupied the first place. Before Aavik nobody had formulated the beauty of language as a principle, however, there had been some talk about the beautiful sound of Estonian. For Aavik the beautiful sound was only an illusion; it was a future task to develop the beauty of the Estonian language. The principle of beauty can be traced back to the German scholar Karl Vossler and the Danish linguist Otto Jespersen. However, Aavik was more influenced by the Hungarian linguistic reform and its leader Ferenc Kazinczy (1759–1831). The aesthetic principle was a tenet of the latter. For Aavik beauty was phonetic beauty (which was in his opinion spoiled by the frequent *s* and *t*, stress on the initial syllable, many short syllables), shortness (which makes the language more energetic and rhythmical), and stylistic and psychological beauty, that is, richness of vocabulary, richness and flexibility of syntax.

The principle of national peculiarity stood in the third place. According to Aavik, this principle encompassed the principle of historical precedence, including correspondence to the phonetic laws. Following the Neogrammarians, the Finno-Ugrian scholars of that time regarded the forms that corresponded to phonetic laws as native and regular, and thus better than the analogical forms that were regarded as occasional deviations. Estonian language planners abandoned this idea in about 1925. The roots of the historical principle lay in Aavik's nationalism and training as a Finno-Ugric scholar, but primarily in the fact that he regarded Finnish as an ideal of purity and perfection. The Finnish language served as source for many innovations (or archaizations because, unlike Estonian, Finnish had retained many ancient features). Aavik made efforts to get rid of what he thought of as German features in the syntax (e.g. the V2 rule in the main clause and the position of the finite verb at the end of the subordinate clause).

The years 1912–1924 are considered to be the heyday of the linguistic reform. One can claim that although Aavik thought that he was a loser, his linguistic reform met with success for the following reasons: (1) a favourable historical situation – a revolutionary period, (2) the youthful flexibility of Standard Estonian, (3) appropriateness and suitability of the innovations, (4)

a well-grounded theory, and (5) energetic propaganda. Aavik managed to enrich Estonian vocabulary with hundreds of Finnish loans, derivatives, and dialect words. Of the two hundred stems that he invented about forty are used, for example, *veenma* ‘convince’, *naasma* ‘return’, *taunima* ‘denounce’, *roim* ‘murder’, *laip* ‘corpse’, *relv* ‘weapon’, *ese* ‘object’, *siiras* ‘candid’, *range* ‘strict’ (for a more detailed discussion see Saari 1970, 1971, Kull 2000: 226–254). In morphology Aavik suggested the *i*-superlative (*suurim* = *kõige suurem* ‘the biggest’), the *maks*-form (*lugemaks* = *lugemiseks*, *selleks et lugeda* ‘in order to read’), the extended *i*-plural (*redeleile* = *redelitele* ‘to ladders’, *suuril* = *suurtel* ‘big (adessive plural)’), the short partitive plural (*vanu* = *vanasid* ‘old’, *töid* = *töösid* ‘jobs’), and the short illative singular (*merre* = *meresse* ‘into the sea’). Compounding has witnessed an intentional increase in the use of the nominative first component (*õlg* + *kübar* ‘straw + hat’, *peegel* + *sile* ‘mirror + smooth’). Valter Tauli analyzed the success rate of Aavik’s proposals (Tauli 1982, 1984a), Paul Ariste studied his theory (Ariste 1980), and Huno Rätsep studied Finnish loans (Rätsep 1981). Helgi Vihma, founder of the Johannes Aavik Society, compiled a bibliography of Aavik and the Estonian language reform (Vihma 2000).

Although the language reform did not reach its ideal, it provided considerable material for the improvement of the standard language and inspired the next generations to cultivate language. Intentional change of the grammatical structure of language is rare in the world practice. The Estonian language reformers succeeded in carrying it out although at the cost of a more complicated structure. The temporal distance already makes it possible to provide balanced assessments (Raag 1998).

The cultivation of the standard language was also a task of two societies founded at the beginning of the 20<sup>th</sup> century – the Estonian Popular Education Society (*Eestimaa Rahvahariduse Selts*, founded in Tallinn in 1906) and the Estonian Literary Society (*Eesti Kirjanduse Selts*, founded in Tartu in 1907). In 1908–1911 these societies organized four so-called language conferences (actually four meetings of linguists) that made attempts to unify both spelling and morphology (Kask 1970: 336–340, 1984: 187–190). The resolutions of the conferences were published in the booklet *Eesti kirjakeele reeglid* ‘Rules of Standard Estonian’ (1912, republished in Veski 1958: 22–34); two thirds of the thirty-six points in that booklet have stood the test of time.

The language committee of the Estonian Literary Society started to compile a normative dictionary, the rules and morphology of which was discussed collectively in 1910–1917. A number of linguists and cultural figures contributed material to this dictionary. *Eesti keele õigekirjutuse-sõnaraamat* ‘A spelling dictionary of Estonian’ was published in Tallinn in 1918 (EKÕS;

149 p). As to its type it was a spelling dictionary, but it included also the morphology of words and some semantic comments. The small dictionary has gone into history as (1) a unifier of standard usage that at that time revealed considerable variation, (2) a groundbreaking Estonian dictionary of correct usage.

The year of publication 1918 is an important landmark in Estonian history – the aspirations for national independence were crowned with success, and the Republic of Estonia was proclaimed on February 24, 1918. Estonians have always strongly associated their state with their own language – a common national language that would meet the needs of Estonian in any walk of life. The new dictionary was widely used in schools, government and local government institutions of the newborn republic that was still fighting for its independence.

**Seventh period:  
Estonian becomes a state language, the standard language  
develops into a polyfunctional language, diversity of the theory  
and practice of language planning**

The period under discussion 1919–1940 is closely intertwined with the previous period, forming the period of forced development of the standard language. Similarly to the previous period, language innovation and language planning went hand in hand and supported each other.

The status of the Estonian showed a continuous upward trend. The 1920 constitution made the Estonian language the only official language of Estonia. The use of the standard language extended to the spheres of government, administration, court, science, higher education, broadcasting, film and records. The Estonian language entered all the educational establishments, and it became an important second language in the native-language schools of the national minorities (Russians, Germans, Swedes, Jews) (Vare 1999: 72–77). The literary norm became stable both in written and spoken language. Correct usage of the standard language became a feature that characterized an educated Estonian. It was taught at school, most writers, the press, publishing houses and editorial offices used it. Language editors played a major role in the latter, for example, the collected works by Eduard Vilde, an Estonian classic, were edited by J. V. Veski (see Laanekask 1978). The regional dialects were turned into home dialects, especially in the peripheral areas, where the differences between the dialects and the standard language are more marked, and the dialectal differences showed a downward trend.

The development of a high-status standard language was a gradual process. The working languages of the Estonian Constituent Assembly (*Asutav Kogu*, 1919) and the first State Assembly (*Riigikogu*, 1921–1923) included at first Estonian, German, and Russian (Raag 1999a: 149). In 1920 49.8 per cent of 223 lecture courses taught by the University of Tartu were in Estonian, 26.4 per cent in Russian, 22.9 per cent in German, and 0.9 per cent in some other language. By contrast, in 1925 of 338 courses 62.5 per cent were in Estonian, 24.8 per cent were in German, 8.2 per cent were in Russian, and 4.5 per cent were in some other language. From then onward the proportion of Estonian-language instruction showed a rapid increase. In 1929 75 per cent of the professors and 85.5 per cent of university lecturers in Tartu taught in Estonian; in the spring semester of 1940 all the courses were taught in the Estonian language with the exception of a single course taught in Russian and a single course in German (Uuspõld 1997). It also became possible thanks to the development of the Estonian-language terminology for higher education and science in 1920–1930. About forty specialized dictionaries were published in a large number of fields (Kask 1938, Kull 2000: 55–59). The linguist J. V. Veski occupies a special place in this work. He was a member of most terminological committees and laid the foundation of Estonian terminology. When coining new terms Veski preferred to use Estonian dialects, to form derivatives and compounds, but he did not oppose borrowings from other languages and translation loans either (Kull 2000: 175–204). Hundreds of specialized terms have become part of the common language.

The scope of the printed word showed a rapid increase:

	magazines	newspapers	books
1919	24–29	24–31	384
1939	205	37–48	circa 1700

(the data about the number of published titles differ, for a more detailed discussion see Liivaku 1995: 121–132). The total number of titles published in 1918–1940 may have amounted to 26,000–27,000 titles. It included original and translated fiction, children's books, textbooks, academic and popular scientific books. In 1939 the newspaper *Päevaleht* 'Daily Newspaper' was circulated in 42,000–46,000 copies and *Postimees* 'Courier' in 15,700–20,000 copies (Liivaku 1995: 150). Regular broadcasting began in 1926; by 1939 the scope of broadcasting had reached nine hours per day and the number of subscribers amounted to 100,000 (ENE: 368). It meant that other sub-languages (fiction, media language) began to emerge in addition to specialized terminology.

The beginning of this period is characterized by the final peak years of the language reform and the heyday of language planning as a whole. A

comparison of the periods 1912–1924 (language reform) and 1920–1935 (language standardization) may leave an erroneous impression as if the arrival of Veski's standardization won and put an end to Aavik's trend. It is true that they were competing trends, and at that time it may have seemed that the question was who would gain the upper hand. In hindsight, however, one can state that the two linguistic giants supplemented each other, which proved fruitful for Standard Estonian.

Johannes Voldemar Veski (1873–1968) was a natural scientist by education, which greatly influenced his understanding of language, the requirements set to language, and the principles of its development. At the outset of his linguistic career in 1913 he regarded language as a living organism – a language sprouts, develops, grows, feeds, leaves behind the useless litter, and enriches itself with new substances (Veski 1958: 39). He ended his train of thought by adding language as a social bearer, which removes the criticism of biologism. Rather it enabled Veski to better understand language change. However, the history of natural sciences made him support the steady evolutionary development of the language reform rather than its development by leaps and revolutions (Veski 1958: 65). His activity is characterized by an intention of a systematist to achieve a 'beautiful orderly structure' and courage to introduce considerable changes in order to achieve this end.

In order to develop a common and unified national language, Veski was first and foremost guided by systemicity, purposefulness, and popular language.

Veski was free from the influence of language history, including the importance of phonetic laws, and treated language only from the synchronic point of view and as a system. In order to attain a consistent system, he coined also terms that were in conflict with theoretical views and language use both in morphology and derivation. In semantics he strove for monosemy by introducing new words for various senses of polysemous words and by differentiating between various senses of synonyms.

One can claim that Veski's aspiration for purposefulness has a theoretical character in the general landscape of Estonian language planning. In his ideal language everything was without exceptions, consistent, logical, and systematic. In his opinion, one has to take it into account not only when coining new words and choosing between the variants, but one has also to improve the existing established words. This view was unacceptable to other language planners. If Veski adopted an innovation suggested by Aavik, then he wished to apply it consistently (e.g. the *i*-plural, the *i*-superlative, *u*-suffixed reflexives).

Veski did not exaggerate with popular language; for him it meant first and foremost ample use of the Estonian resources, including the dialect ma-

terial. In the case of loans he emphasized the need to harmonize them with the Estonian language. In case systematicity and popular language were in conflict, he preferred the former – popular language needs to be purified.

A language planner with such views has more opportunities to cultivate specialized terminology, and therefore Veski's contribution is more outstanding in this field. However, he went into history also as the author of a three-volume *Eesti õigekeelsuse-sõnaraamat* 'Dictionary of Estonian correct usage' (EÕS; vol. 3 was co-authored by Elmar Muuk). The dictionary covers about 130,000 entries, including a large number of specialized terms. Many specialized terms are provided with explanations or German, English, Russian, and Latin equivalents. Also less-known words are provided with explanations. The dictionary provided a large number of potential derivatives and compounds that a developing written language may need. By comparison with its predecessors, the dictionary provides such phonetic features as degree of quantity and palatalization. It provides the morphology of its entries. The dictionary occupies an important place in the history of the written language by (1) unifying and stabilizing the written language, (2) developing the written language by means of many new coinages, (3) further developing the type of the dictionary of correct usage. Veski intended to put with this dictionary the chaos of the popular language on the right tracks and to develop the written language according to a plan. Therefore, the dictionary suffers from some exaggerations in the name of system. However, the language committee of the Estonian Literary Society and the co-work by Elmar Muuk helped to reduce the number of such exaggerations.

Also the work of Elmar Muuk (1901–1941) belongs to this period. In the 1920s he supported Veski's views, but by the 1930s he had become a major language planner, who made an outstanding contribution to fixing the rules of Standard Estonian. He established many rules of spelling, morphology, word-formation, and syntax, or his proposals stood behind the resolutions of the language committee of the Estonian Literary Society. Muuk sought synthesis between the various language planning trends by trying to put into practice all the positive features but did not go along with the extremes. Of Muuk's principles one has to name first and foremost the principles of authentic written usage, tradition of the written language, purposefulness, and pedagogical value. *Väike õigekeelsus-sõnaraamat* 'A concise dictionary of correct usage' by Muuk (1933) witnessed ten editions in Estonia and two in Stockholm and unlike the three-volume dictionary by Veski was available to each Estonian. His dictionary had a suitable format for a popular edition, enjoyed wide distribution, and thus became the actual unifier of Standard Estonian. The dictionary was supplemented by *Eesti keeleõpetus I. Häälikuja vormiõpetus* 'Textbook of Estonian I. Phonetics and morphology' (Muuk

1927a), *Lühike eesti keeleõpetus I. Hääliku- ja vormiõpetus* ‘A short textbook of Estonian I. Phonetics and morphology’ (Muuk 1927b), and *Lühike eesti keeleõpetus II. Tuletus- ja lauseõpetus* ‘A short textbook of Estonian II. Derivation and syntax’ (Muuk, Tedre 1930).

The main issue of the 1920s (and also some later decades) was how and how extensively should Estonian be standardized. The publication of the first volume of the previously mentioned “Dictionary of Estonian correct usage” in 1925 was a major breakthrough towards extensive standardization. It fixed the ‘official’ language. Aavik and some other language reformers regarded it as premature and wished to postpone for another twenty-five years in order to provide some time to get adapted to the innovations and for free competition between parallel variants. However, there was strong pressure for standardization. The year 1927 saw the establishment of the requirement for standardized language both at schools and in book publishing. The Academic Mother Tongue Society (*Akadeemiline Emakeele Selts*), founded in 1920, made a proposal in 1929 that newspapers should be pre-edited for the purpose of unifying the language. Soon it became customary for newspapers and publishing houses to edit the printed word in accordance with the norms established by Veski and Muuk. In case the author did not wish to change his language, the note “the author’s spelling unchanged” was added (Raag 1999a: 173).

Aavik continued his language reforms also during the second half of the 1920s and the 1930s, but he took into account the official trend. In 1936 he published his *Eesti õigekeelsuse õpik ja grammatika* ‘A textbook and grammar of Estonian correct usage’ (Aavik 1936; 464 p), which has remained the only Estonian grammar of correct usage of its kind. It is not a grammar of the language reform despite the fact that in many places the author explained his views that departed from the official position (Kindlam 1980). By the mid-1930s the conflict between language standardization and the language reform was almost over. By that time both sides had adopted many views of each other. The textbook and grammar by Aavik was built on two premises – language cultivation and the description of linguistic structure. As a good teacher the author used extensively two methods – comparison of the right and wrong as well as questions and answers.

In the 1920s and 1930s the professors of the University of Tartu also made an important contribution to the development of Standard Estonian. The Finnish linguist Lauri Kettunen, who worked as a professor of Finnic languages in 1919–1924 at the University of Tartu, published a brochure *Arvustavad märkused keeleuuendusnõuete puhul* ‘Some critical remarks concerning the requirements of the language reform’ (Kettunen 1919). When assessing the innovations, Kettunen proceeded primarily from the principle

of communicative purposefulness (using the contemporary term, Erelt 1985). His claims and predictions were well grounded and almost without contradictions. Another outstanding figure of the linguistic scene of that time was Andrus Saareste, professor of Estonian in 1924–1941, who made a large number of reports about language planning at the Academic Mother Tongue Society and published many articles in the journal *Eesti Keel* ‘Estonian Language’. His most extensive treatment is *Eesti õigekeelsuse päevaküsimustest* ‘Concerning some topical issues of correct Estonian usage’ (Saareste 1937), where Saareste compared and contrasted his own views on the development of the standard language with those of Aavik and Veski (Erelt 1983, Rätsep 1982). Saareste claimed that he assessed speech forms and standpoints from three perspectives: popular language (common language), actual or psychological purposefulness, and the laws that govern a language spontaneously (Saareste 1937: 64). In the case of Saareste one could recognize a strong influence of French general linguistics, especially its psychological and sociological schools. Being an expert of Estonian dialects, he emphasized the continuing role of dialects and common language that developed on their basis in the development of the written language.

The conservative trend of language development exerted less influence. Their most influential representative Kaarel Leetberg published a brochure *Äpardanud keeleuuendus* ‘The failed language reform’ (Leetberg 1927). He supported the juicy popular language and opposed the guidance of the language in the way it was practised by language reformers and standardizers. Others proceeded from the shortcomings of the language and called for radical improvement. Leetberg proceeded from the authentic Estonian usage that could be improved by ‘good speaking’. Everybody should make efforts to express oneself as well as possible and not to await unnatural recommendations. His motto was “a language must come into being in the living language”. Unfortunately, he was regarded as a hopeless conservative, and his views remained largely unknown.

By the end of this period Standard Estonian was a uniform language. The sharp distinctions between the literary usage of different dialect areas and between the ‘official’ and ‘new’ languages has disappeared. The standard language had become a versatile, rich and stylistically diverse; the usage relied upon the skills of writers, journalists, public figures, and specialists.

**Eighth period:  
preservation of Standard Estonian in the Soviet times,  
the reign of the principle of popular language, limitations  
and one-sidedness of language planning**

The next period covers the years 1940–1960. The year 1940 marked the beginning of the Soviet occupation in Estonia, in 1941 World War II reached Estonia, followed by the German occupation. In 1944 Estonia was once again occupied by the Soviet Union, which was more oppressive at the end of the 1940s and the beginning of the 1950s.

Severe blows were dealt to Standard Estonian, its status was dramatically lowered because it stopped being a state language. The Estonian speech community was scattered and many Estonians perished. The number of published titles was drastically decreased; the Estonian-language printed word was extensively destroyed for ideological considerations and perished during the war. Already in 1940 during a few months over 200 media publications were closed down, including the journals *Eesti Keel* 'Estonian Language' and *Eesti Kirjandus* 'Estonian Literature'. In 1941 they were replaced by the monthly journal *Eesti Keel ja Kirjandus* 'Estonian Language and Literature' of which six issues were published before the war began. The beginning of the Soviet occupation saw the nationalization of all the publishing houses and bookshops. Publishing was centralized under the State Publishing Centre of the Estonian SSR. There remained five publishing houses before the war, but from 1949 onwards the Estonian State Publishing House (*Eesti Riiklik Kirjastus*) was the only one book publisher, and the Publishing House of Newspapers and Magazines (*Ajalehtede-Ajakirjade Kirjastus*) was the only publisher of periodicals (ENE). Already the first occupation year saw the banning and destruction of the Estonian-language printed word, which continued during the German occupation and the second Soviet occupation after the war. According to rough calculations about a few dozen million Estonian-language printed items were destroyed (Liivaku 1995: 220–227).

According to various estimates, by the end of the war the number of Estonians reduced by a few dozen per cent (cf. Liivaku 1995: 176, Kirch 1999: 68, Katus 1999: 129). Many Estonians had been killed, deported, imprisoned, killed in action, fled to the West. The latter category may amount to about 70,000–75,000 people (Raag 1999b: 357). During World War II Estonia lost its ethnic minorities, with the exception of Russians, thus becoming an almost monoethnic area. In 1945 the population of Estonia amounted to 854,000 people, of whom 831,000 or 97.3 per cent were Estonians (Katus 1999: 128–129). However, the demographic policy of the empire favoured immigration, which led to a rapid increase of the Russian-language community.

Estonian remained the language of instruction at schools (including higher education), and it remained this way during all the occupations, but Russian was taught at once as the first foreign language.

During both occupations the media content was ideologically one-sided and poor in information. The language adopted numerous terms that related to the new ideologies and systems of government. In fact, the words that entered the language during the German occupation became obsolete soon. During the Soviet occupation most of the information was translated from Russian. Also, over half of the translations of fiction were made from the literature of the peoples of the Soviet Union (including many books by Russian authors or through the Russian language). And yet from the beginning efforts were made to keep to the minimum the number of such Russian direct loans as *agitpunkt*, *bolševik*, and *komsomol*. However, one had to adopt a large number of Soviet translation loans, for example, *klassivaenlane* < Russ *klassovyi vrage* 'class enemy', *lööktöö* < Russ *udarnaya rabota* 'shockwork', *punanurk* < *krasnyi ugolok* 'red corner', *viisaastak* < *pjatiletka* 'five-year period', *teenistuja* < *sluzhaschii* 'employee'. The previous words of address *härre* 'Mr', *proua* 'Mrs', and *preili* 'Miss' were replaced by *kodanik* 'citizen' and *seltsimees* 'comrade'.

Estonian language planning suffered devastating losses. J. Aavik, A. Saareste, and V. Tauli had been forced to flee to Sweden in 1944; E. Muuk had perished in a prison camp in the Urals already in 1941. The Estonian Literary Society and its language committee had been dissolved in 1941, but miraculously the Mother Tongue Society was allowed to continue its activities. J. V. Veski had remained in Estonia and his work met with the approval of the new authorities. In 1945 he was awarded the title of the Merited Scientist of the Estonian SSR, in 1946 he became a member of the Academy of Sciences, and in 1947 he became a professor. J. V. Veski, Ernst Nurm, and Arnold Kask became the leading language planners. Nurm and Kask were well versed in language matters by having been in the 1920s and 1930s active members of the Mother Tongue Society and the Estonian Literary Society and working as teachers of the mother tongue. Although none of them did not achieve the top level of the previous language planners, one has to respect their work and patriotism. They had to work during very hard times when the nihilistic attitude to what had been accomplished in the 1930s was prompted also by the political slogans of the period and not only their own views.

Language planning suffered a drastic decline. The language planning of the 1930s that had had at least three trends had become impoverished and had now only one trend that went into extremes. The representatives of the other trends (especially J. Aavik) were proclaimed to have made serious errors.

Popular language was highly on the agenda, it was especially supported by the most influential mother-tongue teacher Nikolai Remmel, Elmar Elisto, a leading language editor of the publishing house, and Ernst Nurm. Language was largely regarded as a tool for communication; all the other language functions were neglected. No one noticed the special needs of the standard language in comparison with the other sublanguages of the national language or the polyfunctional nature of the standard language. The language reform was labelled as a 'bourgeois language reform', which was said to have served reactionary forces and not the interests of common people. J. V. Veski was one among the few who dared to defend the work of Aavik, richer morphology and word formation. The prevailing trend was to fight against 'useless parallel forms' and for 'popular language'

Standard Estonian was studied at the Department of Estonian of Tartu State University, chaired by J. V. Veski and A. Kask, and at the Institute of Language and Literature of the Academy of Sciences of the Estonian SSR (J. V. Veski and E. Nurm). The only active language committee was that of the Estonian State Publishing House (chairman E. Elisto). Language issues were discussed also at the Mother Tongue Society. In order to meet the post-war needs, three more editions of the "Concise dictionary of correct usage" by E. Muuk were published. Only a few changes were made in these editions, but the author's name was not mentioned any more.

The year 1953 saw the publication of the new *Väike õigekeelsuse sõnaraamat* 'Concise dictionary of correct usage' (VÕS). The dictionary was compiled at the Institute of Language and Literature under the supervision of A. Kask and E. Nurm. Many Soviet terms had to be added, and those that described life in independent Estonia had to be removed. Following the prevailing principle of popular usage, the compilers tried to increase the coverage of popular usage in the dictionary. Both word choice and morphology proceeded from the frequency of occurrence. Many useful and potentially needed speech forms were discarded because they were uncommon in the scanty printed word of the post-war period. The number of parallel forms was forcefully dropped (*i*-plural, short partitive plural, *i*-superlative, the paradigm of the verb *esitella*, only the paradigm of the verb *esitleda* 'present' was retained, etc.). As a consequence, the new dictionary was poorer and stricter than the dictionary by Muuk although its scope was similar (36,000 entries). It was definitely a step backward rather than a step forward. Rigidity was further intensified in a totalitarian society by the common understanding that if a speech form is not listed in the 'linguistic Bible', it is not a correct speech form.

During the cold war period the Estonian language abroad was isolated from the mother country and continued to be based on the pre-war language

planning sources. Later the 1960 and 1976 editions of the orthological dictionary were taken as the basis (see e.g. Tauli 1972: 5–6). In the course of time the language of the Estonians living in exile became increasingly affected by the language of the country of settlement, especially English and Swedish.

The 1940s and 1950s witnessed almost a standstill in Estonian terminology. The new authorities needed first and foremost a dictionary of politics and economics, which was published in 1955. The compilation of another important dictionary, dictionary of law, came to a standstill. However, the development of specialized vocabulary continued little by little in a number of fields (telmatology, astronomy, manual training, forestry, building, etc. – see Kull 2000: 66–70). The Institute of Language and Literature started to compile a card file of recent specialist literature in the 1950s. Specialist glossaries were compiled for each subject, which were subsequently revised by experts in the corresponding fields. This material was then incorporated into a new dictionary the making of which was supervised by Ernst Nurm – *Õigekeelsuse sõnaraamat* ‘Dictionary of correct usage’ (ÕS 1960). It covered about 100,000 entries and included a large number of specialist terms. The choice of words in this dictionary was much more diverse than in the previous dictionary. The dictionary was criticized for inconsistencies in orthoepy, neglect of some useful alternative forms, and word-by-word decisions in morphology. However, for a long time it served as a reliable source for those who wanted to follow the literary norm.

Fortunately, the linguistic crisis in the 1940s and 1950s had a temporary nature. In the 1960s language planning made a step-by-step recovery from the crisis.

**Ninth period:  
further development of Standard Estonian in the Soviet era,  
theory of terminology and standard language,  
renewed language planning**

Despite the fact of the continuing Soviet occupation, the 1960s opened a new period in the history of Standard Estonian. The period ends in 1988 when Estonian acquired the status of a state language or in 1989 when a Language Act was adopted on the threshold of regaining independence.

The reign of Khrushchev and Brezhnev brought some relief in comparison with the Stalin era, but it did not change the general nature of the totalitarian regime. The imperial population policy favoured immigration. According to the 1989 census, the 1.5 million population of Estonia comprised 61.5 percent

of Estonians, 30.3 percent of Russians, 3.1 per cent of Ukrainians, 1.8 per cent of Belorussians; all in all 121 nationalities were represented (Ethnic Issues). The majority of new settlers were speakers of Russian. The domains of using Estonian narrowed due to strong Russian influence. Russian was given the status of an official language of communication between the peoples of the Soviet Union. There were some regions, for example, northeastern Estonia, Paldiski, part of Tallinn, where Estonian was almost not used. The same is true of such walks of life as railway, military, heavy industry, and seafaring. The language policy had an especially pro-Russian character at the end of the 1970s and the beginning of the 1980s when the leadership of the Estonian Communist Party drew up a secret plan in accordance with Moscow guidelines to expand the use of Russian and started to put this plan into practice. Estonian-Russian bilingualism was promoted, Russian was increasingly used for official communication, the teaching of Russian began either in the first form or even in the kindergarten, dissertations were approved in Moscow and they had to be translated into Russian (for a more detailed discussion see Jansen, Ruutsoo 1999: 551–560, Laanekask 2000: 44–48, Rannut 2001, Raag 1999a: 202 ff.).

The number of titles of periodicals and literature started to grow gradually again. From 1965 onwards about 30 Estonian-language newspapers and about 20 magazines were published in Estonia (Liivaku 1995: 233–234). Newspapers, magazines, and books were inexpensive, they were published in numerous copies. By comparison with the other union republics, Estonians were eager to buy books and subscribe to newspapers (Liivaku 1995: 232–236).

The beginning of the 1960s witnessed a renewed interest in language issues. The monthly journal *Keel ja Kirjandus* 'Language and Literature' started publication in 1958. In the same year the language and translation section of the Journalists' Union was founded. Its activities were guided by Henno Meriste in 1958–1984 and after his death by Uno Liivaku until the end of the 1980s. The Journalists' Union played a major role in the development of the media language and in fighting against the Russian influences. From the 1960s onwards the cultural newspaper *Sirp ja Vasar* 'Hammer and Sickle' started to publish regularly articles on language matters. The publication of the 1960 edition of the dictionary of correct usage (ÕS 1960) was accompanied by considerable discussion. The establishment of the All-Republican Committee for Correct Usage in 1960 was a little step towards the democratization of language planning. Unfortunately, the first committee (1960–1965) managed to make only a modest contribution to the development of Standard Estonian. A huge and heterogeneous committee rejected almost all the proposals for changing the norms, including the 1961 proposal

by Estonian-language teachers to allow some informal and dialectal alternative forms in the morphology of Standard Estonian.

The All-Republican Committee for Correct Usage was reorganized in 1972, and its second period of activity (1972–1978) was much more fruitful. Changes were made in morphology, spelling of foreign words, rules for capitalization, etc. An innovative activity was the preparation of guidelines for practical transcription for the names of the republics of the Soviet Union. It was an attempt to shake off the mediating role of the Russian language in the spelling of Armenian, Georgian, Ukrainian, Belorussian, Uzbek, Tajik and other place names and personal names. The planning of names proceeded from the resolutions of the 1967 first Geneva international conference for standardizing place names. International standardization of names must be based on national standardization, the national form is at the same time its international form. Estonians abandoned the principle of adaptation in the spelling of names, and many adaptations of the post-war period were replaced by their original forms (*Madriid* pro *Madrid*, *Liihtenštein* pro *Liechtenstein*).

The second half of the 1960s and the 1970s witnessed a lively interest in language matters. In 1972 the language committee of the Mother Tongue Society organized a word-coining competition. In order to guide the competition the contestants were provided with twenty concepts for which new words were expected. The 182 entries in the competition brought hundreds of proposals, and many of the award-winning proposals have entered the language (e.g. *pardel* ‘electric razor’, *taidlus* ‘amateur performing arts’, *kohuke* ‘glazed roll’, *eirama* ‘ignore’). This kind of word-coining activity was at times ridiculed as the second youth of the language reform, but it was not a good idea to choke and ridicule the popular interest in language. This kind of lively, though largely amateurish, activity helped the Estonian language to survive the Soviet era (see also Kull 2000: 205–225). During this period also two grammatical forms that had been suggested by language reformers became established in the language: *-maks* (the translative form of the *ma*-infinitive) was a new independent form (*tegemaks* ‘in order to do’, *laulmaks* ‘in order to sing’ – proposed in 1925), *-nuks* was a synthetic alternative form of the past conditional (*ta teinuks* = *ta oleks teinud* ‘he would have done’, *ta laulnuks* ‘he would have sung’).

The 1970s saw the publication of a series of books on usage guides that taught how to avoid common errors and improve one’s usage, how to preserve the native language features, including the avoidance of Russianisms when translating from Russian. The public showed great interest in these books (usually 8,000–10,000 copies were printed).

A new dictionary of correct usage that had been prepared at the Institute of Language and Literature was published in 1976 (ÕS 1976). The dictio-

nary covered 115,000 entries and it represented already an established type of the dictionary of correct usage. Four editions of this dictionary amounted to altogether 100,000 copies (which is a surprising figure for a population of one million). Although the dictionary reflected the change in language planning towards a more liberal policy of standardization, these tendencies were not fully taken into account as yet. The publication of the book was followed by considerable discussion and criticism in the press and at the Mother Tongue Society.

At the same time, in 1978 a new national curriculum was drawn up for the teaching of Estonian at secondary schools, and, therefore, the educational circles were also interested in a better balance between language planning and teaching. Time was now ripe to replace the Estonian grammar for secondary schools *Eesti keele grammatika keskkoolile* by Eduard Vääri, which had been used in Estonian schools for decades, with new textbooks. The language planning and teaching committee, headed by Huno Rätsep, Professor of Estonian at Tartu State University, worked on that project for an entire year. Finally, the joint body of linguistic and educational circles managed to put an end to the power of the conservatives, and at the end of 1979 the third All-Republican Committee for Correct Usage was able to start fruitful work. Until that time the actual language planners were held back by the conservative members whose ideas dominated the committee of correct usage. Now the idea that language is a changing and differentiating phenomenon gained the upper hand. During the 1970s also the efforts to marginalize other sublanguages, that is, regional and social dialects, came to an end. The standard language had become strong enough to tolerate also other speech form, more importantly, it was now possible to recognize their value.

The remarkable contribution of this short-lived committee laid the foundation for the dramatic changes in language planning and teaching in the early 1980s. The new textbooks for the secondary school were written by linguists, who tried to offer in addition to correct usage a picture about the essence of language and the specific features and structure of Estonian. The third All-Republican Committee for Correct Usage received many proposals for changing the norm from the Committee of Language Planning and Teaching and after elaborating them adopted major changes in 1979–1983. These resolutions allowed morphological alternative forms in various inflectional types (in trisyllabic words of quantity 3 ending in *-ne* and *-s üldisi raskusi* side by side with *üldiseid raskuseid* ‘common difficulties (partitive plural)’), dual declination in the *akvaarium*-type, *tegeleda*-paradigm in addition to *tegelda*-paradigm, alternatives on the borderline between the *õppima* : *õpin* and *muutama* : *muutun* types; the conditional with personal endings *ma tahaksin* ‘I would like to’, *sa oleksid tahtnud* ‘you would have liked to’ were supple-

mented by the conditional without the personal endings *ma tahaks, sa oleks tahtnud*). Also the rules of writing solidly and separately and those of abbreviation became more liberal. The changes were published in the collection of articles *Kirjakeele teataja* ‘Gazette of the standard language’ (1985).

During this period Valter Tauli, who lived in Sweden in exile, and Henn Saari in Estonia made the greatest contributions to the theory of language planning. Valter Tauli (1907–1986) started to work on his theory at the end of the 1930s when he published an extensive work *Õigekeelsuse ja keelekorralduse põhimõtted ja meetodid* ‘Principles and methods of correct usage and language planning’ (Tauli 1938). It was one of the very few works of this kind in the world. The theory that he completed in the 1960s was J. Aavik’s theory that was passed on and further developed in the information age. He also held the view that natural languages are far from perfect. He was convinced that it is possible to assess objectively the structural elements of a language and on the basis of this assessment it is possible to improve a language according to plan. In 1968 Tauli published a book *Introduction to a Theory of Language Planning*, which has become a classic among the theorists of language planning all over the world (Tauli 1968) and was followed by the Estonian-language version of the book. According to Tauli, “an ideal language is the one that achieves maximum results with minimum resources” For this purpose he elaborated a thorough system of language planning principles. The basic principles – clarity, economy, and the aesthetic principle – had all in all seventeen sub-principles, and there was an application theory with six principles. In addition, there were two principles for morphology and nine principles for vocabulary. In Tauli’s opinion, the most difficult issue was the best proportion of these requirements, the most effective and economical structure, and the extent to which it is expedient to change a language at a certain point in history. His last theoretical article “The failure of language planning research” (Tauli 1984b) took a much more instrumentalist view than ever before. He was rather critical of language planners of a number of countries, and he demanded that conservatism, anachronism, and national purism should be replaced by instrumentalism and efficiency. Tauli maintained close contacts with Estonian language planners – although he was unable to participate directly in the language planning of Estonian, he contributed with his theory and analysis of the work carried out in Estonia.

Henn Saari (1924–1999) was a highly versatile linguist who focused on the theory of standard language first and foremost in the 1970s and 1980s. He was equally well versed in all the branches of grammar (phonology, morphology, word formation) and knew both the contemporary language and language history, which enabled him to dwell on language change, the objectivity and subjectivity of speech forms, language potential, degree of adop-

tion, and other theoretical issues (Saari 1979, 1999). His theory was influenced by Czech, German, and Russian linguistics. He created his own theory of three norms (objective norm in language itself, codification, and the realistic ideal norm) and further elaborated the theoretical background during the transition from the prescriptive black-and-white codification (which was characteristic of Estonia in 1944–1960), to the guiding and directing codification (which emerged during the period under discussion). Unlike the other language planners, he had an open list of language planning principles. Usefulness came first in the hierarchy of principles. By comparison with communicative purposefulness, which is now so characteristic, Saari's principle was broader – social usefulness. This principle was superior to the principles of popularity, systemicity, and originality. For thirty years (1969–1999) Saari had his own radio programme *Keeleminutid* 'Language minutes', where he taught Estonians in a friendly and enjoyable manner to love and learn more about their mother tongue (see Saari 1976 for transcripts for the first years).

From the mid-1960s onwards the development of specialized vocabulary and terminology in a broader sense continued. A large number of terminological committees were at work, where linguists (R. Kull, T. Ereht) worked side by side with subject specialists. The period 1960–1990 saw the publication of over 130 specialized dictionaries (Kull 2000: 61, Ereht 1981, 1986, 1991), including those subject areas where the Russian language dominated (nautical science, military science, aviation, telecommunications). An original terminological theory was developed, which did not follow the example of the Soviet school of terminology, but continued the tradition that had developed in Estonia during the first half of the 20<sup>th</sup> century. In 1969 Uno Mereste formulated a principle, which was bold for a small nationality – a language that creates its specialist terminology later than some other language has the advantage of discovering and avoiding the inadequacies of the other languages. One can better results in the systematization of specialized vocabulary if we do not follow not only a single language, but if we have a number of languages to follow and to compare with. It meant that the principle of minimum discrepancies (from Russian), which was offered by Russians, was discarded. A number of dissertations were defended about the history of Estonian specialized terminology and one about theory – "An analysis of the principles of Estonian terminology" by Henn Saari (Saari 1981, 1989). Tiit Ereht wrote a monograph *Eesti oskuskeel* 'Estonian specialized language' (Ereht 1982) that has been used as a terminological manual by subject specialists to this day. Articles about specialized language were also published by the linguist Rein Kull (a selection can be found in Kull 2000), the economist Uno Mereste (see the collection Mereste 2000), the information scientist Ustus Agur, and others. Systematic terminology was needed for higher

education, science, and the nine-volume *Eesti nõukogude entsüklopeedia* 'Soviet Estonian encyclopedia' (1968–1978) and the eleven volumes of its new and revised edition (1985–1998, entitled *Eesti entsüklopeedia* 'Estonian encyclopedia' starting with the fifth volume).

Numerous Sovietisms and Soviet-style phraseology entered Standard Estonian during the fifty years of Soviet occupation. Also, many names of institutions and enterprises and microtoponyms had a Soviet flavour. In terms of the content, unfortunately, the Soviet-style showed everywhere. Fortunately, the expression plane was kept independent. It was common practice that direct loans were not allowed to enter from colloquial usage to Standard Estonian, e.g. *tavai* 'OK, go ahead', *pakaa* 'bye', *jeeli-jeeli* 'hardly', *pagasnik* 'boot (of a car)', *maika* 'top (of a shirt)' In hindsight some people have thought that the newspaper language was over-Estonianized at that time and that one should have used the Russian terms in order to show that it was 'Russian stuff' (e.g. *perestroika* and not *uutmine* 'perestroika', *glasnost* for *avalikustamine* 'glasnost'). Nevertheless, one might assume that the giving up resistance would have brought much deeper consequences of the Soviet occupation for the standard language. For this reason, the best Estonian language planners took part in the preparation of the four-volume Russian-Estonian dictionary published in 1984–1994.

There were widespread fears of Russian-inspired grammatical changes (e.g. impoverishment of the past tenses, that is, the disappearance of the present and past perfect and their replacement by the simple past, see also Hint 1990). The Estonian language community had deep respect for Standard Estonian and its norms because it was the foundation of the Estonian identity. Language, especially the literary language, served as a means for consolidating the nationality.

#### **Tenth period:**

**Estonian resumes its position as the state language, liberalization of usage (also mingling of registers), democratization of language planning continues, special languages become endangered**

The most recent period in the history of Standard Estonian covers the years since 1989 to this day. It is characteristic that Estonian enjoys a higher official status. The previous predominant language Russian receded from the centre to the periphery, and English and Finnish, which had balanced the Russian influence, took the centre stage. Colloquial language and slang entered the standard language; the language users' sense of language and style deteriorated.

The official status of Estonian changed abruptly – its position was elevated by the 1989 Language Act of the transitional period, the regaining of Estonian independence in 1991, the 1992 Constitution of the Republic of Estonia, and the 1995 new Language Act. The Language Inspectorate, its previous name being the Language Board (*Keeleamet*) has been working since 1990. It performs a supervisory function over the state language.

The 1990s were a decade of major social and linguistic upheaval. Usage changed rapidly. The Estonian language was to unite the citizens of Estonia, but, unfortunately, the national and spiritual values have lost some of their attraction. Usage was liberated over a short period from the socialist but at the same time national rhetoric, being replaced by catchwords of consumerist society and direct foreign loans. Some English and Finnish influence could be felt since the 1970s; already then they were prestigious languages that were opposed to the predominant language Russian. In the early 1990s English took on a new role. There are people who are ready to replace their mother tongue by English because they think that Estonian has a limited use, carries little prestige, and is homespun. English is more profitable, but the society is seeking economic prosperity.

The situation where people seek economic prosperity and are free to express themselves has given rise to many new authors. The corpus of Written Estonian is growing fast quantitatively. Much of what appeared in the early 1990s was published without any editing or even proofreading. Some publishers regarded this kind of revision as a Soviet-style activity, others believed in the language competence of any authors. However, most publishers did not wish to spend any money on language. After numerous embarrassing failures the entrepreneurs who were interested in their reputation began to hire editors. Also more respectable publishing houses and periodicals started to pay more attention to editing. As a result, the usage of the radio and television has improved, only commercial radio stations continue to air errors, bad taste, and vulgarities. The usage of the computer network varies greatly depending on the educational level of the users.

Major changes are taking place on the lexical level. The Soviet layer is being replaced by vocabulary that denotes new things and phenomena (*vöötkood* 'bar code', *rahapesu* 'money laundering', *turvamees* 'security officer', *sülearvuti* 'laptop', *seebiooper* 'soap opera', *kiipkaart* 'smart card', *rahastama* 'to finance', *faksima* 'to fax', and many others). It is also characteristic, however, that some old words that had been sidelined for fifty years were revitalized (*vald* 'rural township', *eestseisus* 'board (of an organization)', *volikogu* 'council (of a town)', *haigekassa* '(national) health service', *hõimupäevad* 'kinship days', *õppetool* 'department (of a university)'). It is commonplace that a word is replaced because it is thought to have a Soviet

flavour to it. Thus, *erakond* ‘party’ is used instead of *partei*, *sotsiaalteadused* ‘social sciences’ is used instead of *ühiskonnateadused*, *kaadriosakond* has become *personaliosakond* ‘personnel department’, etc. One can explain it also by word magic or belief that changing the name will change immediately its essence. The phenomenon is especially common in occupational titles because the prestige of the person who carries this title. For example, people prefer to include such words in the title as *mäenedžer* ‘manager’ or *juht* ‘executive, leader’ (*turundusjuht* ‘marketing executive’, *tootejuht* ‘product manager’, *kvaliteedijuht* ‘quality assurance manager’). There is also preference for foreign-sounding names.

EU membership will set new requirements on the vocabulary. In autumn 2002 the EU Information Secretariat, Mother Tongue Society, Ministry of Education, Estonian Centre of Legal Translation, and the newspaper *Postimees* organized a public word contest in order to fill in some gaps in Estonian eurovocabulary. The contest focused on about a dozen concepts. Six hundred participants sent in about 5,300 suggestions. The suitable words that were selected included, for example, *üleilmastumine* ‘globalization’, *lõimumine* ‘integration’, *täisleppimatus* ‘zero tolerance’, *lähimus* ‘subsidiarity’, *tõukefondid* ‘structural funds’, *rakkerühm* ‘task force’, *mestimine* ‘twinning’, *vabariiklik* ‘non-governmental organization’, and *ühenduse õigustik* ‘*aquis communautaire*’

The use of names underwent a dramatic change in the early 1990s. The streets that had been renamed by Soviet power assumed their previous names. Names of institutions and enterprises were replaced, whereas the naming patterns changed too. The Soviet-style names disappeared (e.g. *Tööpunalipu ordeniga Eesti NSV Riiklik Akadeemiline Teater “Vanemuine”* ‘State Academic Theatre “Vanemuine” of the Estonian SSR decorated with the Order of the Red Labour Flag’ became now *teater Vanemuine* or *Vanemuise teater* ‘The Vanemuine Theatre’, *söökla “Võit”* ‘dining hall “Victory”’ was renamed *Jussi söögituba* ‘Juss’ eatery’). The use of personal names changed too. Parents started to give ‘sophisticated’ foreign-sounding names that were difficult to pronounce and decline for Estonian and that often do not follow the spelling of any language (e.g. *Käthleen*, *Maykl*, *Fränck*).

The recent decades have added also some grammatical changes that in the early 1990s were regarded as Russian influences (Hint 1990, 1996). Research has revealed, however, that they came into being as a result of language-internal and language-external co-impact – usually they are language-internal shifts that have only been amplified by foreign influences (Erelt, Metslang 1998; this article opened the discussion *Muutuv keel* ‘Changing language’ in the journal *Keel ja Kirjandus* that continued for a year and a half). Such phenomena include, for example, the change of quantifiers from

the head to the modifier and number agreement (*osa inimesi* → *osad inimesed* ‘some people’), use of the affirmative verb form in the case of constituent negation (*Laps ei vaja* → *vajab mitte maiustusi, vaid armastust* ‘A child does not need → needs not sweets but love’), frequent use of verb particles to express the perfective aspect although since the language reform some people have fought against it (*Ta raiskas päranduse ära* ‘He wasted his inheritance away’), the *saama*-future (*Elu saab seal olema raske* ‘Life will be difficult there’), and so on. Language planners need to conduct further research into these phenomena.

The 1990s witnessed also some changes in sublanguages. Advertising and computing emerge as new important sublanguages. By comparison with the rest of the language, one can feel the influence of the prestigious languages – English and Finnish. The domains of using Estonian tend to decrease during the late 1990s: business, banking, tourism, telecommunications. The use of English, on the other hand, shows an upward trend. Thus a new situation develops with regard to special languages (Erelt 2000a). Similarly to the previous turn of the century, eurounity at the end of the 20<sup>th</sup> century raises the question whether such small people as Estonians need science and higher education in their own language. Unfortunately, the answer to this question will decide the destiny of Standard Estonian because at present the special languages constitute the most important sublanguage, the mutual interaction of which with the rest of the standard language is vital for both sides. Therefore, Estonian society has realized how important is the problem how to preserve one’s language and at the same time interact closely with the others. Actually this problem is somewhat broader, being a problem of the European countries. It is at the same time a nation-specific and general problem. The problem is not the inadequacy of Estonian terminology – it is well developed and able to develop in all walks of life. The years 1991–1999 witnessed an unusually high number of published specialized dictionaries – almost 160 (Erelt 1997, 2000b). The existing terminological committees continue their work, and in 2001 the Estonian Terminological Society was founded. The legal language is improved by the Estonian Centre of Legal Translation (*Eesti Õigustõlke Keskus*) and the journal *Õiguskeel* ‘Legal Language’, which has been published since 1995. The enormous work done in medicine, IT, nautical science, building, education, ecology, chemistry, and other subject areas is important for the entire written language. Equally important is the translation of computer software into Estonian (in 2001 Microsoft had Word, Outlook, and Setup of Office XP translated into Estonian), and the development of language engineering in Estonia.

Language planning, too, is in a new situation by comparison with the resistance during the Soviet times. In a democratic society it is inconceivable

that language planning could be something else than democratic. Estonian language planning did not have to make a leap – it had already changed during the past decades. In 1993 the language committee of the Mother Tongue Society (*Emakeele Seltsi keeleteimkond*) came into existence. The division continued, actually, the work of the third session of the All-Republican Committee for Correct Usage and followed the previously established principles, and gave a large number of recommendations concerning spelling, morphology, and names. The emerging trends included new and clearer rules (spelling of initials) and the guidance concerning the use of names (see Kirjakeele teataja 2000). The recommendations can now more than ever be based on actual usage, which became possible owing to the existence of a number of language corpora established during the previous decade.

Society witnessed a number of attitudes – one part of society expected commands and bans, a crusade against bad usage, or, in other words, the tightening of screws; others thought that norms of the standard language are unnecessary in a free society, that the usage of a free citizen is free. Tiit Hennoste advocates a polylogical language model that has no central sub-language that would be common for all Estonian. He associates the standard language first and foremost with the state and not the nationality, and thinks that (1) the previously predominant standard language will be replaced by “a large number of possibilities for sublanguages that are relatively equal as to their importance”; (2) “a democratic coexistence of language is emerging, where bilingualism is a normal condition”, it is not anymore ideal to be an Estonian or a speaker of Estonian; (3) the language is enriched with the substance of other languages, with a background of plural ideologies and the changeability of society (Hennoste 1999).

Unfortunately, it is well known that languages without a strong backbone – without a standard language – have been lost, are nowadays on the decline, or their number of speakers has decreased considerably. Therefore, language planners have understood their responsibility to explain the strong potential and the possibilities to express oneself in Estonian, to spread trust towards one’s mother tongue, to explain the diversity of the language, the existence of a number of language varieties, but also the fact that the standard language unites Estonian society. In a small society it strengthens the identity of both of individual and society. It is important that a standard language should be taught as a mother tongue, foreign language, and second language.

A number of important books for language users were published during the last decade of the century: an extensive the so-called scientific grammar *Eesti keele grammatika* (vol. 1 1995, vol. 2 1993, chief editor Mati Ereht), a handbook of Estonian *Eesti keele käsiraamat* that is suitable for the public at large (Ereht *et al.* 1997), *Eesti ortograafia* ‘Estonian spelling’ by Tiiu Ereht

(1995a, three editions), a new type of normative dictionary that continues the tradition of orthological dictionaries (ÕS 1999), *Maailma kohanimed* 'Place names of the world' (Päll 1999). These books fulfilled the aim to write new language planning sources. The normativity of the newest sources *Eesti keele sõnaraamat* ÕS 1999 and *Eesti keele käsiraamat* (Erelt *et al.* 1997) is supported by Decree No 323 of the Government of the Republic of Estonia of October 3, 1995, which makes these works the basis for establishing the norm of the standard language. The year 1999 saw the publication of a fact-rich overview of nationality policy, language policy, and language planning over a century and a half *Från allmogemål till nationalspråk. Språkvård och språkpolitik i Estland från 1857 till 1999* by Raimo Raag (1999a). Also, two books on practical language planning were published – *Keelenõuanne soovitat* 'The Language Advice Bureau recommends' (vol. 1 1996, vol. 2 2000). Both books were compiled on the basis of the materials of the Language Advice Bureau of the Institute of the Estonian Language (previously called the Institute of Language and Literature). Uno Liivaku authored two books: *Kirjakeel ja kirjasõna* 'Written language and the printed word' (Liivaku 1999) and *Väike soovitusõnastik* 'A small dictionary of recommended usage' (Liivaku 2001). Rein Kull published a collection of articles *Kirjakeel, oskuskeel ja üldkeel* 'Standard language, specialized language, and general language' (Kull 2000); Uno Mereste published a collection of all of its articles on language *Oskuskeel ja seaduste keeleline rüü* 'Specialized language and the linguistic shape of laws' (Mereste 2000; the title does not indicate that the book is about many important things concerning the entire standard language). The language scholars and language planners draw the readers' attention to the undesirable Russian, English, and Finnish influences and point to the Estonian possibilities to express the same ideas (Hint 1990, 1996, Kingisepp 1994, Erelt 1995b, Sang 1996, Liivaku 1999 and others). However, as far as the English language is concerned, these writings hardly have any influence. An authoritative dictionary of foreign words is *Võõrsõnade leksikon* (sixth edition 2000), extensively revised by Eduard Vääri and the publishing house "Valgus"

A major event was the launching of the language journal of the Mother Tongue Society *Oma Keel* 'Our Own Language' in 2000. It is the first Estonian linguistic journal that is intended for the public at large because the journal *Eesti Keel*, published in 1922–1940, and the present *Linguistica Uralica* and *Keel ja Kirjandus* are scholarly journals. The journal aims at providing its readers with a picture of the language as a complex system of a large number of varieties. However, its central aims are to maintain the written language and to make the language users realize that the language planners do not ban or allow a certain form but they guide, recommend, and give

advice (Erelt 2000c, 2002). However, each citizen will benefit from the knowledge and observance of the norm of the standard language.

Another sign of linguistic diversity is the emergence of a new South Estonian literary language at the end of the 1980s – the Võru language that is based on the Võru dialect. This language is very different from the North Estonian common language; it is based on the Võru dialect, mainly used for spoken communication, the historical tradition of the South Estonian literary language, poetry written in the Võru dialect, and the authors that used the Võru dialect in their writings. The Foundation of the Võru Language and Culture (*Võru Keele ja Kultuuri Fond*) was set up in 1988; in 1995 became the Võru Institute (*Võru Instituut*). The institute and language activists have contributed to the creation of the language (fiction by Kauksi Ülle, Madis Kõiv, terminology by Enn Kasak, Sulev Iva; newspapers, radio broadcasts, and audio cassettes in the Võru language), the establishment of norms (spelling and grammar debates), the study of attitudes of the speech community and the language itself, as well as creating the status of a standard language for the new language (summer schools, seminars, transactions of the Võru Institute, nativization of the place names, the teaching of the Võru language at the local schools, the writing and publishing of textbooks, etc.). It seems that so far the most difficult problems involved include, on the one hand, how to identify the spread of the language (e.g. including Setumaa, which has a different variety of language and culture), the smallness of the language community (the population of Põlvamaa and Võrumaa amounts to 80,000, and not all of them are proficient in the Võru dialect). On the other hand, it is also difficult to change the negative attitudes to the status of the Võru language both in the Võru and the Estonian language community.

The linguistic diversification that stems from the democratization of society, the invasion of English that is accompanied by globalization, and the considerable proportion of non-Estonian population poses a threat to the use of Estonian as the state language. That is why there is need for the government-funded strategy of the development of the Estonian language. Such a strategy is being drawn up on the order of the Ministry of Education.

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# V.

## COLLOQUIAL ESTONIAN

*Leelo Keevallik*

### 1. Introduction

The term Colloquial Estonian denotes a non-standard spoken variety of Estonian that is understood more or less in the entire speech community, and that is characteristically used in informal everyday settings. The term *colloquial*, although not commonly used in Estonian linguistics, is introduced here as a practical solution for this book, in which we already have included chapters on dialects and the standard (written) language.

The key features of the variety described here are *non-standard*, *spoken*, *common*, and *informal*. None of these features are easy to gauge in every single case. How common is common? Are all non-standard features used overwhelmingly in informal situations? Colloquial language is varied by nature and often includes regional features, possibly to such an extent that we have reason to talk about regional colloquial varieties. Furthermore, colloquial language use is likely to be variable in different social groups. The present chapter will not try to artificially sharpen these fuzzy edges, but rather to concentrate on the core of the present-day colloquial language.

Arguably, we can talk about developments towards a common spoken variety of Estonian from the end of the 19<sup>th</sup> century. The process is closely connected to the assimilation of dialects and the spreading of the standard, both features a reflection of the growing communication possibilities across the country (changes in the laws of mobility, building of railways, the development of traditional media). We may assume that the common spoken variety could first be tracked in more formal registers and that it included major features of the written standard.

Closeness to the written standard has for a long time been considered the preferred state-of-art for all spoken language in Estonia, especially by the general public. Common non-standard language was largely ignored, until we recently started to witness a large-scale invasion of colloquial language into public spheres, most drastically media. Therefore, in contrast to other chapters of this book, this chapter relies on a tiny research base. To avoid overgeneralization of the research results thus far, I have considered it neces-

sary to account for the data of all the reviewed studies, as well as their authors and specific research questions.

Ideally, we would avoid looking at formal settings and at invented or laboratory data. Due to the above reasons, this aim is not always attainable and, for example, in the field of prosody we have to rely on non-spontaneous or even synthesized data attained in laboratory settings. In some cases it will be necessary to include results based on somewhat more formal settings such as radio interviews or selling encounters. In this way, the following accounts of syntax and prosody probably apply for spoken usage in general, while the descriptions of phonology and morphology are more focused on non-standard non-dialectal common features, i.e. on colloquial usage.

As to the data on spoken language, there are two corpora that will often be referred to. The only publicly available one has been accumulated at the department of general linguistics in Tartu and is based on students' recordings and transcriptions (henceforth: the Tartu corpus). The majority of the 386 recordings have been made in Tartu and some speakers reveal quite strong dialectal traits. The corpus includes excerpts from phone conversations (145 in May 2000) as well as face-to-face conversations (221), dialogues as well as multi-party interaction, everyday (109) as well as institutional situations, spontaneous as well as edited speech. In May 2000 the corpus comprised 230,824 words (<http://sys130.psych.ut.ee/~linds/>) but most of the studies reviewed here have relied on earlier considerably smaller versions of the corpus.

The other corpus has been collected and transcribed by myself (henceforth: the LK corpus). It comprises 324 naturally occurring phone conversations of two types: telemarketing calls at a daily newspaper (109 conversations), and everyday calls recorded automatically at the informants' personal phones in Tallinn. In all, there are about 103,000 words in the corpus<sup>1</sup>, which is digitized and includes whole conversations rather than excerpts.

## 2. Lexicon

Lexicon is certainly one of the most accessible parts of a variety – many distinctive items are obvious for the speakers themselves. The archives of the Mother Tongue Society include more than 44,000 cards with “argot” words. Nevertheless, apart from the inclusion of a considerable number of so-called everyday words in recent dictionaries (EKSS, ÕS), comprehensive studies on the lexicon of Colloquial Estonian are still lacking. The fact that the everyday spoken language usage differs from the written variety, has

<sup>1</sup> When examples are taken from the LK corpus, only the original tape code is added at the end of the examples.

naturally not been unfamiliar to the researchers, but it has mainly led to the condemning of “errors” Normative attitudes hindered an unprejudiced study until the resurrection of interest in slang vocabulary about a decade ago, which resulted in the records of the lexicons of at least some limited groups in society (for an overview, see Tender 1994).

## 2.1. The character of the lexicon

The first scholar to take a wider look at the lexicon of what he calls oral speech was Hennoste (1998, nearly identical in 2000) who attempts a general classification by introducing three new groups of words. The first is called *everyday lexicon*, being defined as lexicon that cannot be used in formal situations. The second is called *words of spontaneous speech*, not defined, but said to exist due to orality, the tempo of text production in speech, and because of rhetorical taboos in formal situations. The third class is called *dialogue words*, i.e. words that regulate interaction.

Everyday lexicon is characterized in contrast to public interaction and has mostly to do with taboos and emotionality. Taboos include taboo activities (*keppi*- ‘make love’, a denominal derivative of *kepp* ‘stick’), breaking interactional norms (swearing: *persse* ‘ass:ILL’; offences: *lehm* ‘cow’; expressions of rage etc.), and pejorative words (*lakku*- ‘drink’, lit. ‘slick’). Emotionality is expressed in augmentatives (*õudne*, *jõle*, both ‘awful’) and diminutives (primarily *ke*-suffix, e.g. *tibuke* ‘little chicken’).

Words of spontaneous speech are divided into three subgroups. Particles are used for structuring the text (*ja* ‘and’, *aga* ‘but’), they reflect the process of text production (*noh* ‘NOH’, *kurat* ‘devil’), refer to the speakers’ mental processes, indicate insecurity of knowledge (*nagu*, *justkui*, both ‘as if’), and highlight important parts of the texts (*ainult* ‘only’, *isegi* ‘even’). Other frequent groups are modal and private verbs (*tuleb* ‘must:3SG’, *arva*- ‘be of the opinion’), and general words, including verbs (*ole*- ‘be’, *tege*- ‘do’), nouns (*asi* ‘thing’) and pronouns (*ma* ‘I’, *see/se* ‘this’).

Dialogue words are said to comprise mainly particles and vocalizations. Phatic particles are said to direct and keep up conversation, they include responses and back-channels (*jah/jaa* ‘yes’, *mhmh* ‘uhuh’), startings and endings of turns and topics (*nii*, *noh*, see section 2.4), and emotional commenting reactions (*oi* ‘oh’). Conative particles are questions (*kuda* ‘how’), orders and requests (*noh*, *säh* ‘here you are’), greetings (*tere* ‘hi’, *head aega* ‘good bye’), and thanks (*aitäh*).

The first presentation of a quantitative comparison of the lexicon of informal spoken language to other varieties, gives us statements about what

has proved to be “more frequent” (Hennoste *et al.* 2000, the Tartu corpus of 52,000 words). Apparently, in contrast to formal spoken usage there were more shortenings in informal speech (e.g. in the particles *aa* < *ahah/ahaa*, appr. ‘okay’, *kule* < *kuule*, appr. ‘listen’), more laughter, more particles (*noh*, *onju*, see section 2.4 and Table 2), more personal pronouns (1SG and 2SG), more emotive words (*ah*), more hedges (*vist* ‘maybe’), and more negation. By way of explanation, informal communication is said to be more emotional and spontaneous.

As to the origin of colloquial lexicon, students of slang have been interested in loanwords. Loog’s study on the slang words of Tallinn schoolchildren (Loog, Hein 1992) resulted in a mere 15% loans. Of these, 39% were from English (e.g. *bänd* ‘band’), 26% from Finnish (e.g. *tossud* ‘trainers (i.e. shoes)’), and 24% from Russian (e.g. *morda* ‘face’). The last figure is somewhat surprising considering all the effort put into teaching and propagating Russian during the Soviet years. On the other hand, it has been quite clear that Estonians in general have not considered Russian a prestigious language.

Apart from senior secondary school students’ slang, we know that musicians’ slang comprises about 39% loans, mainly from English, and criminal slang up to 45%, mainly from Russian (Tender 1994). Estonian babytalk shares almost half of its stems with Latvian, although the ways of borrowing seem to be varied, e.g. Est Lat *pai* ‘good (being)’ (K. Pajusalu 1996). In respect of more common language, we can notice that many relatively recent loanwords are used widely in everyday life: *kreisi* ‘crazy’, *point* ‘point’, as in “the point is”, *kamm oon* ‘come on’, appr. ‘don’t bullshit’, *stoori* ‘story’, *luuser* ‘loser’, *friik* ‘freak’, *aa laa/ala* (from French *à la*), and numerous others.

As to other sources of lexicon, a frequent and possibly spontaneous word-formation mechanism in colloquial language is shortening. Besides the regular (spontaneous?) shortening of long vowels and diphthongs in most function words (*siis/sis* ‘then’, *kui/ku* ‘if’), and in non-first components of compounds and postpositions (*väljama* < *väljamaa* ‘foreign countries’, *kodubole* < *kodu poole* ‘towards home’), there are many cases where the colloquial variant is several syllables shorter (see Table 1). The shorter forms are often used variably with the standard ones and they are most probably recognized as colloquial, i.e. they are not really spontaneous any more.

Naturally, even petrified expressions may have a regular shorter form, e.g. *aust ö(e)(l)da*, st. *ausalt öelda* ‘to be honest’; *ses mõts et*, st. *selles mõttes et* ‘in the sense that’ They are often even pronounced with only one prominent stress as compound words. Similarly, some shortened words show a regular tendency to latch onto other words, e.g. the negation word *ei* in *ma* ‘I’ + *ei* > *mai*, *ta* ‘s/he’ + *ei* > *tai*.

**Table 1.** Examples of items with regular shorter variants in Colloquial Estonian

Standard	Colloquial	Translation
aga	a	'but' a particle
igasugused	igast	'different (kinds of):PL'
kolmkümmend	kolgend	'thirty'
-kümmend	-(k)end/-nd, e.g. kaheksand	'-ty, e.g. eighty'
pension	penšs	'pension'
praktiliselt	prak(t)se(l)t	'in principle, almost'
mõtles(i)-	mõts(i)-	'think:IMF'
suhteliselt	suh(t)(e)se(l)t/suht	'relatively'
ütles(i)-	üts(i)-	'say:IMF'

Compounding is another common way of achieving new lexical items (according to Hennoste 2000 and the Tartu corpus, the most frequent means of achieving non-standard lexicon). However, the colloquial compounds are often a result of a routinization in interaction. Some candidates are suggested in Table 2, but the exact meaning of many of the resulting compounds has to wait for future research.

**Table 2.** Examples of routinized compounds in Colloquial Estonian

Components	Translation	Compound	Meaning
ah + sa	AH + you:SG'	assa	interjection
eks + ole	'EKS + be'	eksole	particle
kas + või	'QUES + or'	kasvõi	particle, appr. 'even'
kes + see	'who + this'	kesse	'who'
kuuled + sa	'listen:2SG + you:SG'	ku(u)letsa	particle
mis + asi	'what + thing'	misasi	'what'
nii + et	'NII + that'	niet	summarizing particle
no/noo + jaa/jah	'NO + yes'	no(o)jaa/no(o)jah	confirmation particle
on + ju	'is:3SG + JU'	onju	particle
saad + aru	'understand:2SG'	sadaru	particle

The table could be enlarged with numerous reduplicative items, e.g. *jajaa*, *jajah*, *jaajaja* 'yes', *oototot* 'O(O)T', *nonoh* 'NO(H)'. On the other hand, reduplication is likely to be worth considering a prolific spoken language word-formation means, as a separate category.

Other word-formation means mentioned in literature include e.g. semantic formation (*kapp* 'athletic guy', lit. 'cupboard'), sound-switching

(*möladraama*, from *melodraama* ‘Indian film’, comp. *möla* ‘meaningless talk’; Tender 1994), (euphemistic) replacing words with sounds (*mine peesse*, from *mine persse* ‘go to hell’, lit. ‘go to ass’), category change (*sitt* ‘shit’, noun > adjective), acronyms made into pronounceable words (*tipp* < *TPI* ‘Tallinn Technical University’; Hennoste 2000), affective gemination (*jummal* < *jumal* ‘god’), and other strengthenings (*hulka* < *hulga* ‘many’; Saareste 1927). For derivation, see section 4.3.

More generally, colloquial possibilities to carry out common verbal actions tend to be varied. For example, if we need our conversation partner to repeat what he/she just said, the polite way to do it is with *kuidas (palun)?* lit. ‘how (please)?’, as all Estonian mothers have repeatedly reminded their children. Colloquially, the variants include at least *ah*, *mida*, *misasja*, *mis*, *mes*, *mäs*, *meh*, *mäh*, and *mh*.

## 2.2. Slang and registers

Youth slang is among the more distinctive group varieties of most languages in modern cultures. The first Estonian youth slang dictionary is based on contemporary data from senior secondary school students in Tallinn (Loog 1991). The dictionary comprises about 7,500 words and includes information about 125 easily definable phenomena, often concerning general taboo and “youth” areas, e.g. a stupid student, cheat at an exam, make love.

Several considerably smaller slang collections have concerned the language of soldiers, university students, musicians, and criminals. No recordings have yet been involved in Estonian slang research.

To decide whether a word belongs to group slang or to general colloquial usage, we should look at the spreading of the item. Needless to say, at the moment we can only rely on intuition. Some evaluative student words collected by Tender (1984) are certainly widespread among adults, e.g. negative evaluation words *ajuvaba* ‘brainless’ (*ajuvaba üritus* ‘boring event’), *mage* ‘tasteless’ (*mage film* ‘bad movie’), *nõme* ‘dull’ (*nõme kuju* ‘dull person’), *nüri* ‘blunt’ (*nüri koht* ‘dull place’). Furthermore, Tender (2000) has pointed out that some parts of slang may be surprisingly persistent in time. He has compared collections from the 1920s and 1930s with his own contemporary ones, and found several identical names of school subjects, e.g. *ma’a*, st. *matemaatika* ‘maths’; *e’sta*, st. *eesti keel* ‘the Estonian language’. While they might not be used on a daily basis in the adult world, these words certainly remain part of our common language experience.

From among different registers of Colloquial Estonian, only babytalk has attracted brief attention. Ariste (1962) has noted extensive palatalization and

gemination in babytalk, as well as reduplication (*aua auu* 'dog'). K. Pajusalu (1996) has looked at the etymology of present-day babytalk and found that it has had a wide North-Estonian or all-Estonian spread. Examples include *pepu* 'bottom', *tibu* 'chicken, small child', and *pähh* 'bad thing, don't do it'

### 2.3. Deixis and pronouns

The colloquial usage of the demonstrative pronoun *see* 'this/that' reveals some features that suggest its development into a definite article (R. Pajusalu 1997a, 1999). On the basis of two radio programmes and one conversation between students, it has been demonstrated that besides referring to entities mentioned earlier (more demonstrative usage), *see* can also refer to entities identifiable via shared knowledge or to entities only known to the speaker (more article-like usage). In Example 1, the cyclists are only definite for the speaker who has been telling about his/her trip to Malta.

- (1) T: Jääb arusaamatuks, kuhu **need jalgratturid** veel mahuvad, sest nende jaoks eraldi teelõike pole 'It remains unclear where **the cyclists** (*need* 'this/that:PL') find space, because there are no special stretches of roads for them' (R. Pajusalu 1997a: 161)

In addition, *see* is sometimes interchangeable with *tema* ~ *ta* 'he/she', although it has generally been assumed that *see* refers to inanimate and *tema* ~ *ta* to animate referents. R. Pajusalu (1995, 1997b) looked at 500 utterances from radio interviews (and at a similar amount of newspaper data). She demonstrated that the more "physical" the object, the more likely it was to be referred to as *ta*, and on the contrary, the more "event-like" the entity, the more likely it was to be referred to as *see*. An example (2) of an inanimate physical object referred to by *ta* follows. All the bold *tas* refer to the painting.

- (2) 1 A: ja ma ei piinle piltide juures kaua 'And I don't torture myself with the pictures for too long'  
 2 B: tähendab selles mõttes (.) et sa teed **ta** valmis ja [jääd rahule 'You mean, you make **her** ready and feel satisfied'  
 3 A: [ma teen **ta** valmis no ja sis ma (.) noh mul on juba teised käsil ja ja kui **ta** on kehva eks ma viskan **ta** minema 'I make **her** ready and then I have some others going already and if **she** is bad, then I'll probably throw **her** away' (R. Pajusalu 1995: 88)

There are actually two different systems of demonstrative pronouns in spoken Estonian, as people from Southern Estonia use the distal *too* in addition

to *see* where the distinction is necessary. On the other hand, *too* is also used in the standard language, e.g. in narrative contexts as references to non-main characters, i.e. not to the most recent grammatical subjects (R. Pajusalu 1996a, 1997b).

Another characteristic pronominal feature of Colloquial Estonian is the specific usage of *mingi* ‘some/any kind of’. Besides being an indefinite pronoun and reinforcing negation similar to the written standard (e.g. *pole mingit kahtlust* ‘there is absolutely no doubt’, *mingit* ‘some/any kind of:PRT’), it shows that the following number is an approximation (e.g. *mingi nelikend aastat* ‘about forty years’). Furthermore, it is used for presenting referential NPs as indefinite ones and for de-concretization of non-referential NPs (R. Pajusalu 2000a, the Tartu corpus). For example, if little is known about the entity, it may be de-concretized by *mingi* as in Example 3.

- (3) A: ei ma ütlen tal on *mingi*: *laps* juba: ‘No, I’m saying she has got a child already’ (R. Pajusalu 2000a: 93)

Indefiniteness may also be expressed by *üks* ‘one’. It may mean ‘about’ (*üks kaheksakümmend kilo liha* ‘about eighty kilos of meat’), but it may also introduce an indefinite inanimate object (*ah on üks multifilm jälle* ‘well, it’s a cartoon again’), or a new referent in a narrative opening (*mõtles meil üks=ee õde käis õõ=m Taanis suvel* ‘you know, one of our nurses was in Denmark last summer’). *Üks* and *mingi* are often interchangeable, but *mingi* indicates a greater degree of vagueness and implies total unfamiliarity even for the speaker as opposed to mere presumed unidentifiability by the hearer in *üks* (R. Pajusalu 2000b). Neither of them, however, can be seen as a strong candidate for becoming an indefinite article yet because of their relatively low frequency.

## 2.4. Particles

Although many modalizing, focusing, hedging, intensifying, etc. particles are not unfamiliar in the written language, there is probably a difference in the frequency of usage. Besides, particles used especially for interactive purposes are likely to be marginalized in the written standard.

Until recently, particles were often mocked because of their salience and high frequency. They have been called names and exaggerated examples have been invented to ridicule their usage. The first serious attempt to study them in Estonian linguistics was made by Metslang (1985), who looked at the widespread *nagu* ‘like, as if’. She showed that it could be used for hedging,

i.e. for politeness modalization (her examples are invented: *See sai oleks nagu natuke nätskeks jäänud* ‘This bun seems to have remained somewhat doughy’). She also mentions that *nagu* may have group symbolic value for the young and that it is used in hesitations, but these functions were not regarded as legitimate at the time.

In spoken Estonian, the *no/noo/noh/n/nh/nonoh* particle is by far the most frequent, forming about 0.3% of all the lexical items in the LK corpus, and about 0.2% of the Tartu corpus. Therefore, the particle has also attracted considerable attention (Loog 1992, Hennoste 1994, 2000, 2001), but since it is undoubtedly one of the most demanding particles to describe, we cannot even be sure yet that it is actually not a complex of particles with (somewhat) differing functions.

So far, it has been suggested that *noh* reflects the process of text production, i.e. it belongs to “the inner monologue” of the speaker (Hennoste 1994). It may be part of a formulation (see Example 4).

- (4) K: /---/ see eeldab? (...) *noh*=kõrgemat nagu mõtlemistaset inimeselt ka. ‘this presupposes (...) **NOH** higher level of thinking from the person’ (Hennoste 1994: 18)

In a later account based on the Tartu corpus, Hennoste (2000, 2001) calls *noh* an editing particle and *no* a junction particle, but apart from *noh* being involved in formulation, their functions seem to be largely identical. Both are said to mark contrast, thematic change, transition to background information, or clarification, and to initiate dispreferred turns. In agreeing turns, they are claimed to indicate reservation.

A couple of studies have focused on the interactional analysis of particles. The particle *ahah/ahaa/aahah/ah/aa* functions as a change-of-state and a realization token (Keevallik 1999a, the LK corpus). Speaker orientation to *ahah* as a change-of-information-state token could be demonstrated by the following example.

- (5) M – telemarketer, K – somebody at the client’s place
- 1 M: aloo (.) kas Mati Kaaro ‘Hello, is this Mati Kaaro?’
  - 2 K: a ei ole kodus praegu ‘He is not at home at the moment’
  - 3 M: ma räägin Tallinnast Eesti Õhtulehest ‘I’m calling you from Tallinn, from EÕ’
  - 4 K: jah ‘Yes’
  - 5 M: te:ma nimel oli tellitud siin kakskümmend päeva meie Õhtulehte ‘Õ has been subscribed to in his name’
  - 6 K: ahah ‘AHAH’
  - 7 M: ka:s olete: kursis ‘Are you familiar with that’ (S1A12)

After the telemarketer has introduced herself and announced that the person who is not at home has subscribed to a newspaper, K answers *ahah* in line 6. This answer is treated by M as indicating that the previous information was new to K, since in line 7 she asks about M's familiarity with the fact of subscribing.

The particle *et* (a subjunction and complementizer in the written standard, appr. 'that') seems to be spreading in the function that could generally be formulated as attributing meanings (Keevallik 2000, the LK corpus) but may further be developing into a more general conjunction. A case of attributing meanings to the interlocutor is presented in Example 6. The client K, who has had an introductory subscription, is evasive about what he thinks of the newspaper in line 1. In line 2, the telemarketer M proposes a clarification for why K lacks an opinion – that he has had the paper for too short a time.

- (6) 1 K: e:i:: oska praegu midagi öelda 'At the moment (I) cannot say anything'  
 2 M: *et* liiga vähe veel käind jah 'ET (you've) had it for too short (a time)'  
 3 K: jaa 'Yes' (S1A16)

In case of attributions to the interlocutor, the latter is always expected to agree or disagree in the following turn, which effectively demonstrates that *et*-turns really are interpretations of, or guesses at, what the interlocutor may have meant.

Another particle that we are already beginning to understand is *nii* (appr. 'so'). It has been shown to function as a topic closer and opener (R. Pajusalu 1996b, 1999), and more widely as a transition marker from one (conversational) action to another. The particle *nii et / niet* is used to initiate a conclusion from, and/or summary of, the talk thus far, and as a transition marker from one conversational phase to another (Keevallik 2000).

Among Estonian particles there are several original verb forms, e.g. *kuule/kule* ('listen:IMP') and *tähendab/tändab/tähemb/täemb/tämb* ('mean:3SG'). *Oota/ota/ooot/ot* ('wait:IMP') has been shown to function as a kind of conversational stop sign (Keevallik 2001a). It initiates pauses, alternative activities, thinking periods and word searches, digressions (even clause-internally), repairs and clarification requests – all of which require a period of temporary "time out" for the projected course of action. Furthermore, in some cases the form *ota* seems to have grammaticalized into a topic-disjunctive particle.

A brief description of many Estonian particles from a more discourse-analytic perspective can be found in Hennoste (2000). He says, for example, that *mhmh* (appr. 'uhuh') shows that the person is listening and is distancing himself in a wide sense (from the conversation, from the topic, from the

viewpoint, from taking the turn) and that it can be used as a reaction to a received answer. An example of the latter follows.

- (7) 1 T: jah nii=et pidutsesite kõvasti. (0.5) 'Okay, so you had a wild party'  
 2 H: noo=nagu sünnipäevale kohane. 'Well, as appropriate for a birthday'  
 3 T: **mhmh?** 'MHMH' (Hennoste 2000: 1792)

Among other things, Hennoste states that *jah* 'yes' is a confirmation or agreement particle, or a so-called editing particle used for initiating and finishing a repair sequence. *Ei* 'no' shows that the speaker does not agree with the previous one.

### 3. Phonology

Unfortunately, not much has been established concerning non-standard pronunciation and the prosodic features of connected speech. The only experimental phonetic study dealing with the quality of sounds in colloquial language is by Pajupuu (2001). She has shown that compared to prosodically prominent vowels produced in laboratory settings, the high and mid-high vowels (*i*, *ü*, *u*, and *õ*, *o* respectively) are lower in conversation, while the back vowels *u* and *o* are considerably fronted.

#### 3.1. Phonological features

At the present moment there seem to be three major ways of retrieving information about non-standard and non-dialectal pronunciation in Estonian. There are orthoepic studies and their complaints about "errors", e.g. Kraut (1994) and Liivaku (1998) criticize the pronunciation on TV and Laugaste (1974) scrutinizes Estonian on the theatre stage. Secondly, several linguists have briefly mentioned features that they have observed in the speech community and would consider colloquial or wrong. In contrast to mostly personal observations by the linguists themselves, Laugaste (1964) summarizes the studies by senior secondary school students on "language errors" among their friends. Thirdly, we could attain data by working with the recordings of the existing corpora. So far, the transcription of the Tartu corpus marks the phonetic-phonological divergences only sporadically (summarized in Hennoste 2000), and the LK corpus marks only a limited number of features, albeit regularly.

Since the work with recordings still remains to be done and no single author has yet claimed comprehensiveness with regard to observations, we

can only hope that the accumulated list of features mentioned by at least two authors gives us a fuller and less haphazard picture than the accounts so far (Table 3).

**Table 3.** Observed non-standard/colloquial phonology

Based on Ariste 1939 (A39), Aavik 1950 (V50), Saareste 1952 (S52), Laugaste 1964 (L64), 1974 (L74), Hint 1978a (N78), K. Pajusalu 1992 (P92), Kraut 1994 (K94), 1998 (K98), K. Pajusalu 1997 (P 97), Liivaku 1998 (I98), T. Ereht 2000 (R00), Hennoste 2000 (H00), Kerge 2000 (E00), the LK corpus (LK).

### 3.1. Single short vowels

Feature	Standard	Observed	Source
e ~ i	esimeses, roheline, ütles 'first:INS, green, say:IMF:3SG'	esimises, rohiline, ütlis	S52d L64 H00
e ~ ä	uue, lähe, vähe, enam, eraldi 'new:GEN, go, little, any more, separately'	uuä, lähä, vähä, änam, äraldi	A39d+ S52d L64 L74td+ P92r+ K94 K98 P97 H00 LK
i ~ e	taldrik, teenindab, lollim 'plate, serve:3SG, stupid:COMP'	taldrek, teenendab, lollem	A39d+ S52d K94 K98 H00
o ~ u / unstressed syllables	auto, šokolaad, kilo 'car, chocolate, kilogram'	autu, šokulaad, kilu	L64 P97 H00
ä ~ e / _r	pärast, päris, päralt 'after, real, at the disposal'	perast, peris, peralt	A39d L64 K98 H00
ü ~ ö / _h	üheksa, pühapäev, püha 'nine, Sunday, holy'	öheksa, põhappäv, pöha	A39d L74td K94 K98 E00 H00
V fronting / j_	janu, jagama, jonn, just 'thirst, divide, obstinacy, exactly'	jänu, jägama, jönn, jüst	A39d+ S52d L64 P92r K98
V ~ 0 / C_C in unstressed syll.	tahavad, kahekesi, kopikad 'want:3PL, twosome, copeck:PL'	tahvad, kaheksi, kopkad	L64 R00 LK

## 3.2. Long vowels and diphthongs

Feature	Standard	Observed	Source
õõ ~ õe	põõsas, võõras 'bush, strange(r)'	põesas, võeras	A39 S52d L64d P97 K98
üü ~ üi	nüüd, küünal, süüdata 'now, candle, light:INF'	nüid, küinal, süidata	A39 S52d L64 P97 K98
ao ~ au	kaob, taob 'disappear:3SG, beat:3SG'	kaub, taub	L74 H00
ea ~ ia ~ äa	vead, rea, tean 'mistake:PL/ pull:2SG, line:GEN, know:1SG'	viad, ria, täan	A39d L64 P92r K98 H00
ea ~ ää	seadma, teada 'arrange, know:INF'	säädma, täada	S52d L64 LK
ei ~ e	teile, seitse 'you:PL:ALL, seven'	tele, setse	S52d, K94
oa ~ ua	toas, noad 'room:INS, knife:PL	tuas, nuad	A39d L64 K98
oe ~ ue	toed, loeme 'support:PL, read:1PL'	tued, lueme	A39d H00
õi ~ ei	lõikama, kõik 'cut:INF, all'	leikama, keik	A39d H00
äe ~ ää	päev, näed, käes 'day, see:2SG, hand:INS'	pääv, nääd, kääs	A39 S52 L64 L74td K94 K98d H00 LK
äe ~ äi	päev, päevik 'day, diary'	päiv, päivik	A39 S52d L64 K98 H00
äo ~ äu	näod, taome 'face:PL, hammer:1PL	näud, taume	L64 K98d
õe ~ õõ	õelda, kõetud 'say:INF, heat:IPS:PPT'	õõlda, kõötud	A39 L74td K98
õe, õa ~ üe, üa	õeldud, põab 'say:IPS:PPT, cut:3SG'	üeldud, püab	A39d H00
Vi ~ V+	mõistan, kuidagi, muidugi 'understand:1SG, somehow, of course'	mõştan, kud'agi, mud'ugi	K98 LK

### 3.3. Consonants

Feature	Standard	Observed	Source
b, d ~ 0 / C_(C)	number, kelder, andnud 'number, cellar, give:PPT'	nummer, keller, annud	L64 H00 LK
0 ~ p, d / t / C_C	küünlad, hamster, valss 'candle:PL, hamster , waltz'	küündlad, hampster, valts	L64 H00
f ~ v/hv	foto, film, telefon 'photo, film, telephone'	voto, vilm, telehvon/televon	A39 V50 L64 K98 E00 LK
hv ~ ff	kohv, rahvas, kahvel 'coffee, people, fork'	koff, raffas, kaffel	A39td V50 L64 L74td K98
h ~ 0 / V_V	kaheksa, igaks juhuks 'eight, in case'	kaeksa, igaks juks	K98 E00 H00 LK
h ~ 0 / #_	hall, hotelli, hea 'gray, hotel, good'	all, otelli, ea	A39 L64 P97 H00 LK
lj ~ lI	väljas, palju, naljakas 'out:INS, many, funny'	väl'las, pa'l'u, na'l'akas	A39 S52 L64 K98 H00
s ~ ss	jänesed, öösel 'hare:PL, night:ADS'	jänessed, öössel	L64 K98
š, ž ~ s	finiš, tušš, loož 'finish, ink, loge'	finis, tuss, loos	L64 K98 P97
t ~ 0 / C_C	tahtsid, lihtsalt, justkui 'want:IMF:2SG/3PL, simply, as if'	tahsid, lihsalt, juskui	K98 E00 H00 LK
initial stops in compounds	ettepoole, allkirja 'forward, signature:GEN'	eteppoole/ettebole, alkkirja	A39 A65 K94 K98 I98 H00

### 3.4. Quantity

Feature	Standard	Observed	Source
Q3 ~ Q2	v'äike, p'ehme, a nda 'small, soft, give:INF'	väike, pehme, anda	A39 L64 L74 N78b P92r K98
Q2 ~ Q3	palju, saunas, ahnete 'many, sauna:INS, greedy:PL:GEN'	p'alju, s'aunas, ahnete	A39 L64 L74td P92r I98d K98
Q2 ~ Q1	Tallinnas, hommik, sõnnikuhunnik 'Tallinn:INS, morning, dunghill'	Talinas, omik, sõnikuhunik	L64 K98 H00 R00
Q1 ~ Q2	koridor, samet, vasak 'hall, velvet, left'	korridor, sammet, vassak	L64 K98

There are obviously numerous problems when compiling such an overview of a complicated, varying and changing phenomenon. To start with, the standardization decisions may have an impact on what could be considered colloquial. For example, only a decade ago the forms *hää* 'good' and *pää* 'head' would have been considered non-standard with merely the counterparts *hea* and *pea* accredited (ea ~ ää in Table 3.2). At the moment, these particular variants are accepted in the standard, while others with the same varying feature are not.

Many standardized features have been varying with non-standard ones so widely and for such a long time that it is rather doubtful whether the non-standard forms would generally be experienced as colloquial. An example could be the long and overlong quantity of *põhjus* 'reason' (standard Q3) and *otsus* 'decision' (standard Q2), not included in the above table. The ambition of the author has been to exclude from this chapter non-standard features that are very unlikely to be experienced as colloquial.

Nevertheless, there are several features in the above tables that would probably not be evaluated as extremely colloquial by the speakers. Forms like *annud* (Table 3.3) and *õheksa* (3.1) are quite likely show up in more formal settings without strong connotations attributed to them. At the same time, some of the items have acquired an almost symbolic value of colloquial or non-standard speech, e.g. *taldrek* (Table 3.1). The majority of the items could be placed in between these two extremes and the speakers are probably aware of them to a different extent, partly depending on whether the choice is categorical or gradual. Social variation should not be discarded either.

The only thoroughly studied phonological feature of everyday spoken Estonian is the variation of word-initial *h* (Cui 1999, Table 3.3). It is nowadays clearly connected to the formality of the situation: in formal settings *h* is almost always pronounced as appropriate according to the written standard. In informal situations, the variation (63% of the 1376 forms with *h*) is co-influenced by the phonological context, the frequency of the word, and the educational level of the speaker.

It has not been the aim here to account for the origin of the features. We could merely mention that while many features have been dialectal or regional in a traditional sense, some of them have been claimed to be specific to Tallinn (marked by *td* after the author code in Table 3; single *d* marks the authors who have considered the feature dialectal, and *d+* indicates that only some forms with this feature have been considered dialectal). The main problem of determining colloquiality vs. regionality is that we often lack empirical knowledge about the present spreading of these features, not to mention their potential frequency differences in various parts of the country. For example, it is quite likely that vowel fronting after the glide *j* is more frequent

in Western Estonia (Table 3.3). K. Pajusalu (1992) has gauged that some of the features in the tables are regional (marked by *r* after the author code). However, features characterized as dialectal by all the authors (e.g. *kaiv*, st. *kaev* ‘well’; *veike*, st. *väike* ‘small’) have been excluded altogether from Table 3 in order to focus it – as far as possible – on the supposedly common features.

Finally, there are many differences from standard pronunciation that only pertain to a single word or a couple of words, and they should therefore probably not be treated as systematic phonological differences from the standard. At the same time, many of these words are extremely frequent and most probably easily recognizable for the speakers as colloquial. Some obvious examples are given below (Table 4).

**Table 4.** Some phonologically divergent stems and word forms of Colloquial Estonian

Standard	Colloquial	Translation
eile	eila	‘yesterday’
kuidas	kuda(s)	‘how’
niikui	ni(i)gu	‘like, as if’
pliit	pliita	‘stove’
pluus	pluuse	‘blouse’
pole, pold	põle/põl, põld	‘is not’
praegu	präegu/präägu/praega/präega/prääga etc.	‘at the moment’
vastu	vasta	‘against’
õhtu	õhta	‘evening’
ära	ää	‘NEG:IMP’ perfective particle
üles	ülesse	‘up’

It should also be pointed out that the above tables do not generally account for the pronunciation of foreign words and names, which has otherwise attracted much attention from Estonian linguists. Correct pronunciation of all foreign words, including non-native diphthongs and consonant clusters exactly as in writing, has been considered a high-status marker in Estonian society. Consequently, a lower status of the speaker may be traced by his/her replacement of foreign sounds *f*, *š*, and *ž* (see Table 3.3).

Finally, there are two sounds in Colloquial Estonian that are not found in the standard. Firstly, the laryngeal stop in negative back-channels (*mqmm/äqää/õqõõ/eqää* where *q* marks a laryngeal stop), which is not included in phonetic/phonological standards because of its limited and very specific usage in conversational items; secondly, neutralized vowels occur in colloquial language, especially regularly in back-channels.

### 3.2. Intonation

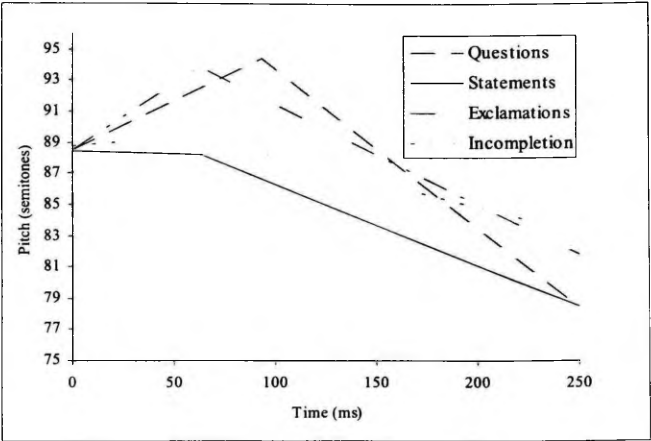
The only empirical knowledge we have about Estonian prosody in casual settings is based on the speech of three informants. The results show that in pre-pausal position, the unstressed second syllable of a disyllabic sequence and the stressed first syllable in Q3 are lengthened (Krull 1997). In addition, temporal differences between quantity degrees, especially syllabic ratios, were sometimes even enhanced when compared to data reported from laboratory speech. At the same time, the typical F0 contours for Q2 and Q3 were not preserved (Krull 1993, Engstrand, Krull 1994).

As to the prosodic properties of larger units than words, we have to rely on experimental or tightly controlled data, and on impressionistic judgements. According to popular belief, Estonian intonation is monotonous and meaningless. The general impression of the prevailing terminal fall has found support in several experimental studies (Vende 1973, Pajupuu 1990, 2000). At the same time, the contours do not coincide. While statements and at least some questions with question words seem to fall all the way, other questions, exclamations, and sentences with lists may involve considerable rises and higher pitch on focused words (Vende 1973, Lippus *et al.* 1977). Asu and Nolan (2001) have shown that there is a categorical phonological choice for the speakers to mark a particular question intonationally by using an upstep or not.

Probably the most compact presentation of pitch contours as perceived by Estonians can still be found in Vende (1982). The study involved 100 subjects and 228 synthesized stimuli of a monosyllabic word (*saab* 'get / receive / become / be able to:3SG') with varying pitch peak, initial and final pitch of the vowel, and the temporal distance of the turning-point from the onset of the vowel.

As we can see from the graph, questions and exclamations have a higher turning point pitch than statements and incompletes, while exclamations and statements have a lower final pitch than the other two categories.

One of the problematic assumptions of the Estonian studies on intonation, is the belief that there is a direct mapping between the meaning and/or properties of the sentence and the acoustic dimensions of pitch (e.g. Mihkla *et al.* 2000). These assumptions do not allow for relatively independent intonational patterns used as a resource in interaction. An attempt to avoid direct mapping has been made by Asu (2001) who has established a mediating level of categories of four intonational pitch accents (a fall, a fall with an "upstep", a low nucleus, and a rise). The latter occurs sporadically in questions, e.g. *Ja kus on siis Tuuli?* 'So where is Tuuli then?', and since it has been a common belief among Estonian linguists that a rise is not characteristic

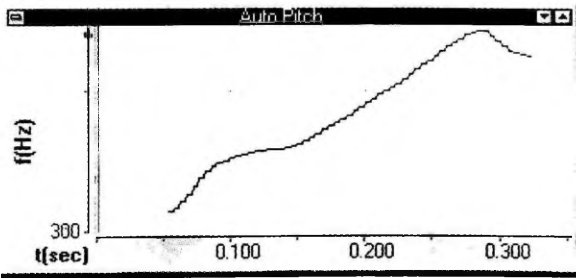


**Figure 1.** Average contours of synthesized monosyllabic utterances identified as questions, statements, exclamations or incomplete utterances by 50% or more listeners.  
Adapted from Vende (1982: 97) by Eva Liina Asu

of Estonian, Asu hypothesizes that a rising intonation may be a foreign feature spreading among younger people.

At the same time, when looking at intonation in informal conversations, a terminal rise does not seem to be too rare. In a brief perceptual pilot study of 385 intonation units (defined after DuBois) in a casual phone conversation between two sisters, there were 33 terminal rises which might indicate that there is a genuine rising intonational pattern in (Colloquial?) Estonian, possibly used for urging the other interactant to continue, answer, or the like. An example of the common back-channel *mhmh* follows, supported by a graph of its characteristic contour, rising in this case from 300 to more than 350 Hz.

- (8) 1 L: *mhmh* niet põ- põhimõtselt pärast nelja sa oled Mustakal onju= ‘Uhuh, so in principle you are going to be at Mustakas after four, aren’t you’  
2 E: =*mhmh*? ‘Uhuh’ (M1AE8)



**Figure 2.** The pitch contour of *mhmh* in Example 8

## 4. Morphology

### 4.1. Inflection

In the field of colloquial morphology we have to rely mainly on observations and error analysis. Specific features are probably not too numerous, since morphological digressions in usage have constantly been under scrutiny (see e.g. Hint 1978b, 1979, 1980a, 1980b) and have often resulted in adjustments of the standard. However, the relation between colloquial and standard language is by no means uncomplicated.

Many standard forms are lacking in colloquial usage, e.g. the synthetic conditional and quotative forms in the past tense (*tulnuksin* 'come:PPT:COND:1SG' vs. *oleksin tulnud* 'be:COND:1SG come:PPT') and many short plural and superlative forms (st. *põlled* 'field:PL:ADS', *mustim* 'black:SUP'). Some standard forms seem to have become archaic, e.g. 1<sup>st</sup> person plural imperative forms with the ending *gem/kem*, especially in negation (*ärgem tulgem* 'NEG:IMP:1SG come:IMP:1SG'). In some cases, the standard form may be very infrequent in common spoken usage, e.g. coll. *ohklikut*, st. *ohklikku* 'dangerous:PRT'; coll. *kontserdite*, st. *kontsertide* 'concert:PL:GEN'

On the other hand, standardization may have sometimes resulted in the dominance of the legitimate form even in spoken usage. For at least half a century, the correct inflection of the word *mõlema* 'both:GEN' has required the stem vowel *a*, while in common usage the stem vowel has been *i* (e.g. *mõlemile* 'both:ALL', *mõlemist* 'both:ELT'). At present, in the LK corpus, only the *a*-stem is represented (with 20 occurrences).

Naturally, the standard and non-standard forms may exist in variation. This has happened with the past participle, where the standard ending *nud* is in variation with *nd*, *d/t* or *0*, e.g. *eland*, st. *elanud* 'live:PPT'; *seist*, st. *seisnud* 'stand:PPT'; *and*, st. *andnud* 'give:PPT'. On the basis of 50 hours of candid recordings of non-dialect speakers in various settings (3229 forms), it has been shown that the three most influential factors in the choice of the form are stress weight, formality of the situation, and voicedness of the preceding segment (Keevallik 1994, 1996). Similarly, the comparative of some bisyllabic stems ending in *a* varies, e.g. *vääram*, st. *väärem* 'wrong:COMP', and the standard formation is not used productively by the youngest generation any more (K. Pajusalu 1995).

In order to trace the differences from the standard that may be experienced as colloquial, a table has been compiled over more divergent inflectional features noticed by at least two linguists. One of the most interesting sources in this regard is T. Erelt's overview of the questions posed to the public language counsellor at the Institute of the Estonian Language in 1995–1998 (Erelt 2000). These questions may give us hints of which standard fea-

tures the general public considers unnatural and/or where the colloquial option has not been felt to be “correct”.

**Table 5.** Observed non-standard/colloquial inflectional morphology

Based on Aavik 1950 (V50), Saareste 1952 (S52), Laugaste 1964 (L64), 1974 (L74), Hint 1978a (N78), K. Pajusalu 1992 (P92), 1997 (P97), Kraut *et al.* 1998 (K98), Liivaku 1998 (I98), Ots 1998 (O98), Hennoste 2000 (H00), T. Ereht 2000 (R00), Kerge 2000 (E00), the LK corpus (LK).

### 5.1. Noun inflection

Feature	Standard	Observed	Source
more general PRT:SG ending <i>d/t</i>	onu, eelnõu, ümbrikku ‘uncle, project, envelope’	onut, eelnõud, ümbrikut	L64 I98 K98 R00 LK
more general PRT:PL ending <i>si</i>	laudu, nägusid, ameteid ‘table, face, profession’	laudasi, nägusi, ametisi	S52d L64 L74 P92r P97 H00 E00 R00 LK
different stem in PRT:SG	suhkrut, meetrit, liitrit ‘sugar, metre, litre’	suhkurt, meetert, liitert	V50 S52d L64 K98 R00
PRT:PL <i>a</i>	kive, käsi, poisse ‘stone, hand, boy’	kiva, käsa, poissa	L64 S52d P97
NOM:SG= GEN:SG	kohv, vali, kehv ‘coffee:NOM, loud:NOM, bad:NOM’	kohvi, valju, kehva	L64 K98 E00 R00 LK
analogical NOM:SG and PRT:PL	küüs, lääs, kaasi ‘nail:NOM, West:NOM, lock:PL:PRT’	küün, lään, kaani	S52 L64 N78 P92r K98 E00 R00
analogical NOM:SG	palitu, osuti ‘coat:NOM, hand (of a clock):NOM’	palit, osut	S52 K98
<i>da</i> -stem	nüri, vilut, mõrult ‘blunt:GEN, chilly:PRT, bitter:ABL	nürida, viludat, mõrudalt	L64 N78 I98 K98 R00
short ILL:SG	voodisse, teatrisse, keldrisse ‘bed, theatre, cellar’	voodi, teatri, keldri	L64 K98 H00 R00
ILL:SG without <i>d</i>	meelde, juurde, keelde ‘mind, to/towards, language’	meele, juure, keele	S52 P92r P97 H00 LK
INS:SG in the strong grade	vannis, jalas, näljas ‘bath, leg, hunger’	v`annisi, j`algas, n`algas	S52 L64 P92r K98
different inflection	albumit, portsjonite ‘album:PRT, portion:PL:GEN’	albumi, portsjonide	L64 K98 R00

different inflection in PL	küünalde, tütardest 'candle:PL:GEN, daughter:PL:ELT'	küünlate, tütretest	L64 K98
	tooreste, võigastel 'raw:PL:GEN, disgusting:PL:ALL	toorete, võikatel	V50 L64 L74 K98 R00
double comparative	rohkem võrdsed 'more:COMP equal:PL	rohkem võrdsemad	I98 O98 E00
double superlative	kõige silmapaistvam 'most outstanding:COMP'	kõige silmapaistvaim	I98 O98 R00

### 5.1. Verb inflection

Feature	Standard	Observed	Source
haplogy in IPS:PR and IPS:PPT	süüdistatakse, armastatud 'accuse:IPS:PR, love:IPS:PPT'	süüdistakse, armastud	S52 P97 LK
da/ta ending in IPS:PR	ollakse, pannakse, viiakse 'be:IPS:PR, put:IPS:PR, take (away):IPS:PR'	oldakse, pantakse, viidakse	K98 LK
a ending in NEG:IPS	ei tehta, ei tulda 'NEG do:IPS, NEG come:IPS'	ei teha, ei tulla	P92r R00d H00
nd/d/t/0 ending in PPT	uisutanud, olnud, võtnud 'skate, be, take'	uisutand, old, võtt	S52d P97 E00 LK
vad ending in IMF:PL	jätsid, tulid 'leave:IMS:3PL, come:IMS:3PL'	jätsivad, tulivad	V50 P92r E00

Like in the case of phonology, regional and social variation of these features is still unknown, as is the extent to which speakers are conscious of them, i.e. their actual degree of colloquiality. While some of the features probably go unnoticed in everyday interaction, others such as the *a*-plural (Table 5.1) and *(s)ivad*-imperfect (5.2) are highly (stylistically, regionally) marked, and the forms *küün* and *kaani* (Table 5.1) are even likely to attract corrections by observant academics. Features that are very unlikely to be experienced as colloquial have been left out of the tables, e.g. inflecting both parts of a compound as in *eluksajaks*, st. *eluajaks* 'lifetime:TRA'

Several morphological features only pertain to a single word or a couple of words and should thus not be counted as general morphological differences (see Table 6 for examples).

**Table 6.** Some inflectionally divergent word forms  
and words with divergent inflection  
in Colloquial Estonian

Standard	Colloquial	Translation
joosta, joostud, joostakse etc.	jooksta, jookstud, jookstakse etc.	'run:INF PPT:IPS, IPS:PR'
julgenud, julgetakse etc.	julenud, juletakse etc.	'dare:PPT, IPS:PR'
juus, juuste etc.	juuks, juukste etc.	'hair:NOM, GEN:PL'
koju	kodu, kottu	'home:ILL
lasknud	lasnud	'let:PPT'
osa (inimesi), osa (inimeste) etc.	osad (inimesed), osade (inimeste)	'some (people):NOM, GEN'
töötada, töötanud etc.	töödata, töödanud etc.	'work:INF PPT'
vähi, vähki, vähkide etc.	vähja, vähja, vähjade etc.	'crab:GEN, PRT, GEN:PL
õlle, õlut, õllede etc.	õlu, õlu, õlude etc.	'beer:GEN, PRT, GEN:PL

We can see that in several instances the colloquial language strives towards a greater regularity through the analogy in a grammatical paradigm, e.g. *si*-partitive (Table 5.1), or in an inflectional paradigm of a word, e.g. the forms *jookstud* 'run:IPS:PPT', and *õlu* 'beer:GEN' (Table 6). It may also happen that the logic of the standard does not apply colloquially, i.e. in the case of double superlatives, colloquial usage seems rather to rely on redundancy (e.g. *kõige silmapaistvaim* 'most outstanding', Table 5.1).

#### 4.2. Some inflectional tendencies

Verbal person and number endings tend to be lost in the conditional mood and in 1<sup>st</sup> person plural negative imperative forms with *ärme* 'NEG:IMP:1PL', e.g. *ma oleks pro ma oleksin* 'I be:COND pro I be:COND:1SG', *ärme söö pro ärme sööme* 'let's not eat pro eat:1PL' While endless conditional forms are also acknowledged in the standard, it is still believed that there are especially few endings in colloquial language, whereas the two options actually seem to occur equally often (the LK corpus). Since the endless imperative forms are not introduced in the standard yet, they are probably perceived to be more markedly informal. In addition, in colloquial usage there is primarily one verb that sometimes loses its personal ending in the imperfect, namely *mõtle*- 'think' It is used for reporting thoughts in the construction *N mõts et* 'N think:IMF that' (4 times in 1SG in the LK corpus, once in 3SG).

Among adjectives, there are a couple of items that are used without case and number endings in contrast to the standard. Examples include *igast* ‘different’ and *kõiksugu* ‘all kinds of’, e.g. in *igast üritustele*, st. *igasugustele üritustele* ‘different vs. different:PL:ALL event:PL:ALL’; *kõiksugu asju*, st. *kõiksuguseid asju* ‘all kinds of vs. all kinds of:PL:PRT things:PL:PRT’ At the same time, these two words have already shortened into what could probably be seen as independent incongruent items in colloquial language.

The only grammatical category studied systematically in spoken usage is quotative, where in formal situations forms with the standard verbal ending *vat* prevail. In informal situations pluperfect and the imperfect of the verb *pida-* ‘must’ in combination with *ma*-infinitive are more common (Toomet 2000, the Tartu corpus and special interviews).

- (9) A. hh noo tähendab taksojuht **oli** talle mingisugust siga **keeranud** ‘Well, the taxi driver had fucked with him in some way’ pluperfect  
 B. Raudla räägitakse=et ju et **pidi** esimese kooli direktoriks **saama** ‘(They) say that Raudla will become the director of the school number one’, *pidi* ‘must:IMF:3SG’ + *ma*-infinitive (Toomet 2000: 252)

Finally, it could be noted that the construction *sai* ‘get:IMF:3SG’ + impersonal participle is used to talk about 1<sup>st</sup> person in Colloquial Estonian. In the following example, P is describing what had happened at the camp she had just arrived from. The constructions are boldfaced.

- (10) 1 P: =kolm päeva: jutti niimodi kõiksugu mai tea misasju **sai tehtud** öö läbi üldse: mitte **magatud** ja ‘Three days in a row like that, all kinds of I don’t know what things **we/I did** (lit. ‘were done’), **we/I didn’t sleep** (lit. ‘it was not slept’) and’  
 2 V: mhmh= ‘Uhuh’  
 3 P: =saunas **käidud** ja: õ(.) saunast lumme **üpatud** ja ‘**we/I went** (lit. ‘it was gone’) to the sauna and **we/I jumped** (lit. ‘it was jumped’) into the snow and’ (P8B4)

### 4.3. Derivation

Most of the studies available have focused on the derivation of slang lexicon. The following table is a summary of the more frequent nominal suffixes in Tallinn youth slang and in oral speech (the latter according to Hennoste 2000), while an attempt has been made to provide more widespread, i.e. colloquial examples.

**Table 7. Frequent nominal derivative suffixes  
in slang and oral speech**

Based on Kaplinski 1985 (N85), Tomingas 1986 (T86), Loog 1991 (G91), Loog, Hein 1992 (G92), Tender 1994 (D94), 2000 (D00), Hennoste 2000 (H00).

Suffix	Example	Standard	Translation (approximate)	Source
a	pruta, mobla	pruut, mobiiltelefon	'girlfriend, cellular phone'	T86 G91 G92 D94 D00 H00
ar	prükkar, lespar	Ø, lesbi	'homeless, lesbian'	G91 G92 D94 H00
e	lope, pralle	Ø, Ø	'easy, party'	G91 D94 H00
er	krammer, mikker	grammofon, mikrofon	'gramophone, microphone'	G91 D94 H00
i	õbi, krõbi	õpetaja, Ø	'teacher, old person'	G91 D94
ka	naiska, telka	naine, televiisor	'woman, TV-set'	G91 D94 D00 H00
kas	radikas, pohmakas	radiaator, Ø	'heater, hangover'	N85 T86 G91 G92 D94 H00
ku	telku, venku	televiisor, venelane	'TV-set, a Russian'	G91 D94 H00
unn	labrunn, orgunn	Ø, organiseerimine	'party, organisation'	G91 D94
ps	limps, Nõmps	limonaad, Nõmme	'soft drink, a part of Tallinn'	G91 G92 H00
s	kots, koks	kodu, kokteil	'home, cocktail'	T86 G91 H00
t	kilt, vant	kilomeeter, venelane	'kilometre, a Russian'	G91 H00
ts	kints, kolgats	kino, Ø	'cinema, tall person'	G91 T86 H00
u	spiku, mersu	spikker, Mercedes	'cheating aid, Mercedes'	T86 G91 H00

None of the 7 sources provide any statistics, although many state that *kas* is the absolute leader in terms of frequency and productivity. The authors seem to concentrate on non-standard suffixes (*a*, *ka*, *ku*, *unn*, *s*, *ps*, *t*), and derivations with divergent (slang / colloquial) stems. Some suffixes derive words in a different way in slang / colloquial language, e.g. the suffix *i* derives words for gadgets in the standard and words for persons in slang / colloquial language. Often the mechanisms of derivation, shortening, and/or gemination result in words of two inflectional types: words with Q2 and no grade alternation (e.g. *pralle* 'party'), and words with Q3 and weakening grade alternation (e.g. *vant* 'a Russian'; Kerge 1990, Hennoste 2000).

None of the authors have discovered a comparable amount of verbal and adverbial suffixes in their data. According to Hennoste (2000) the frequent verb suffixes used to derive colloquial stems are *i*, *ta* and *ise*, e.g. *ropsi*- ‘vomit’, *moluta*- ‘do nothing’, *mölise*- ‘argue, talk too much’. It is not said how frequency is judged in this study. Some other suffixes that may prove to be reasonably productive are *tse* (*nilbitse*- ‘be rude’), *sta* (*läbusta*- ‘cause a mess’), and *rda* (*siiberda*- ‘roam’). In addition, Kasik (2000) has traced a new trend of *a*-derivation in newly loaned verbal stems, e.g. *šoppi*-/*šoppa*- ‘shop’ and *surfi*-/*surfa*- ‘surf’, which opens up the language system for new verbs with strengthening grade alternation.

A couple of adverbs occur with special suffixes in colloquial language, e.g. *ks* in *muideks* ‘by the way’, *st* in *praegust/praegast/präägast* ‘at the moment’, *ki/gi* in *täitsagi* ‘quite’, and the combination of the latter (*muidugist* ‘of course’, *jällegist* ‘again’). Somewhat distinctively, the standard adverb *natuke(ne)* ‘a little bit’ may occur in what seems to be the genitive, e.g. *natukese palju* ‘a little bit too much’. The only more productive colloquial suffix seems to be *s(a)*, as in *nats(a)* < *natuke*, *veits(a)* < *veidi*, both ‘a little bit’.

The colloquial suffix *(s)a* seems to occur even in adjectives (e.g. *prosta* < Russ *prostoi* ‘primitive’ and in positive evaluation words *kihvt* < *kihvt* lit. ‘poison’, *änka/änksa* < *äge* lit. ‘impetuous’) as well as *s* (*sünks* < *sünge* ‘positive evaluation’, lit. ‘gloomy’), *ns* (*tibens-tobens* < *tipp-topp*, *lahens* < *lahe*, both ‘positive evaluation’). The standard *kas* occurs with colloquial stems (*opakas*, *väärakas*, both ‘stupid’).

## 5. Syntax

### 5.1. Word order

Estonian word order has been claimed to be free, with different orders merely reflecting pragmatic differences. However, studies of spoken language reveal strong tendencies of at least SV and VO. Võik (1990) was the first scholar to include some radio and conversation data in her graduation thesis. On the basis of 117 sentences she arrived at 82% SO, 69% SV, and 65% VO (in the written language at least SV and VS occur almost equally often; Tael 1988). A pilot study of the order of S, V, and O in a 20-minute casual conversation from the LK corpus suggested that there might be an even stronger basic word order in conversational Estonian – SV comprised 82%, and VO 76%. Since only grammatical S was taken into account, VS order was mostly explainable in terms of pragmatic factors; it was common in possessive and interrogative clauses, and clauses with predicate locatives.

In spoken narratives, subjectless and verb-initial clauses seem to be much more frequent than in the written language (43% vs. 28%, and 31% vs. 18%). These clauses appeared to be most frequent in complications and resolutions of the narrative, probably because the actor remained the same for a while (Lindström 2000). An example follows with the verbs boldfaced.

- (11) N: **ostis** siis viimase suure triikimis**laua**, (.) **tuli koju**, **oli** lõpp **õnnes**, **pakkis lahti**, **pani üles**, 'He/she bought the last large ironing table, came home, was very happy, opened the package, put (it) up' VO,VA,VA,VA,VA (Lindström 2000: 197)

## 5.2. Questions

In colloquial language, questions may be formed quite differently from the standard. For example, a tag or the specific question intonation may be used in otherwise declarative clauses (see section 3.2) and besides the standard clause-initial particle *kas* in yes-no questions there are numerous clause-final particles. In a comprehensive study based on plays, children's literature, tourist phrase collections, and own inventions, Metslang (1981) mentions many question particles used in tag-questions (e.g. *eks ole*, *ega ju*, *jah*, *ah*, clause-final *mis*, all meaning appr. 'isn't it').

Obviously, questioning means vary in differing sequential positions in conversations. For example, second position repair initiations include interrogative means that do not locate the problem (e.g. *mis* 'what', *jah* 'yes'), questions that locate the problem item with the help of a question word or a repetition with or without a particle (*ah tänava pääl* 'AH in the street?', *ei olnud jah* 'It wasn't JAH'), and candidate understandings (Strandson 2001). An example of the latter follows, in line 2 speaker C wonders whether the condolences were sent to the sons.

- (12) 1 A: tänä ma- tänä olid matused. eilses lehes oli pilt ka sest emast=ä. (0.8)  
pojad peredega avaldavad kaastunnet. (0.5) 'The funerals were to day. There was a photo in the paper yesterday, sons with families send their condolences'  
2 C: **poegadele p(h)eredega=vä**. 'To sons with families VÄ?'  
3 A: ei, pojad peredega. 'No, sons with families. (Hennoste 2001: 182)

The question in this example is formulated with the help of the very frequent question-final particle *või/võ/võe/ve/vei/vä/väi/vä* 'or' in spoken (Colloquial) Estonian, most commonly *vä*.

The conjunction *või* seems to have developed into a marker for self-initiation of repair as well as a sentence-final particle used in other-initiations

of repair (as in Example 12). On the basis of the latter it has become a general sentence-final interrogative particle (Lindström 2001, the Tartu corpus, 397 sentences with final *või* and its variants).

### 5.3. Other syntactic constructions

Several linguists have pointed out single syntactic constructions that seem to be characteristic of spoken Estonian. For example, divergent (colloquial?) word order in *Ei ta tule sul Tartu ühti* ‘He won’t come to Tartu’ with the negation word placed initially (Kerge 2000), the construction VS + *küll* ‘KÜLL’ (*teen ma küll* ‘I’ll do (it)’) to express strong irony in youth slang (Loog, Hein 1992), general spoken language features such as dislocations (*muna noh see siia asemele tuleks leida midagi muud* ‘egg, well, we should replace it with something’) and double bind structures (*no sa räägid täitsa rumalusi ajad praegu suust välja* lit. ‘you are talking complete rubbish is coming out of your mouth now’; Vöik 1990, Hennoste 2001), reformulations and insertions (Hennoste 2001), syntactic reduplication (Keevallik 2001b). The latter is used to carry out specific actions in certain sequential positions, i.e. in second pair parts of ritualized exchanges, in confirmative/disconfirmative or agreeing/disagreeing actions, and in repeated actions. An example of confirming a supposition follows.

- (13) 1 M: @ ega Kadri vist ei ole ‘Kadri isn’t there, I guess’  
 2 V: ei ole ei ole ‘No, she isn’t’ (M1B4)

### 5.4. Temporal adverbs

Numerals and some time adverbials show a tendency to be uninflected as temporal adverbs in Colloquial Estonian. For example, *üritus toimus viies august* *pro* *üritus toimus viiendal augustil* ‘the event took place on the fifth of August, fifth:NOM august:NOM *pro* fifth:ADS august:ADS’, *õhtu tulen koju* *pro* *õhtul tulen koju* ‘at night I(’ll) come home, night:NOM/GEN *pro* night:ADS’ Some time adverbs have a special non-adessive form: *tuli ööse meile* *pro* *tuli öösel meile* ‘came to our place at night, night *pro* night:ADS’ The interrogative time pronouns *kunas* ‘when’ and *millal/millas* ‘when’ can also be used without case endings as *kuna* and *milla*.

## 6. Communication patterns

### 6.1. Conversational sequences

When talking about spoken language and its usage in interaction, the norms and practices of behaviour cannot be ignored. The first Estonian study on interactional sequencing was a Gricean look at checking dialogue (used when something has remained unclear for an interactor) and planning dialogue (used to influence further communication, e.g. asking for permission to carry out an interactive step) in fiction (R. Pajusalu 1990). For example, the manner of carrying out an interactive step may often be subject to checking dialogue (e.g. anger in Example 14).

- (14) 1 B: Halloo?! ‘Hello’  
 2 A: Oi-oi kui kuri! Magasid juba vöi? ‘Gosh, (you sound) angry! Were you asleep already VÖI?’ (R. Pajusalu 1990: 400)

From a conversation analytic viewpoint, Rääbis (2000) has looked at 120 phone call openings, 86 of them institutional. She showed that the members of the Estonian speech community rarely introduce themselves at home. In 72% of the cases the answerer only produced a short response to the summons (most frequently *halloo/hallo/haloo/halo*). At institutional phones self-presentation is naturally much more common but not exclusive.

Compared to the American phone call openings the Estonian ones have the opposite order between presentations and greetings – in Estonian conversations greetings come first. Furthermore, how-are-you sequences are by no means as common in Estonian as in American calls and they are not reciprocal. An example follows (15) of an opening where all the sequences are represented, and no turn includes parts of several sequences.

- (15) 1 V: kuulen ‘I’m listening’  
 2 H: mt=.hh e tere päevast. ‘Hello’ lit. ‘good day’  
 2 V: tere? ‘Hello’  
 3 H: Einar Mattias ja Tiritamm siinpool. (0.5) ‘Einar Mattias and T here’  
 3 V: jah (0.5) ‘Yes’  
 4 H: e saate praegu vestelda. ‘Can you talk at the moment?’  
 4 V: ee jaa? (.) ma: kuulen teid? ‘Yes, I’m listening to you’ (Rääbis 2000: 417)

In the above example, 1 marks the response to the summons, 2 the greeting sequence (in American openings in the third position), 3 the presentation/recognition sequence (in American openings in the second position), and 4 the clarification sequence (how-are-you sequences and/or question sequences about the present situation).

In another conversation study, Rääbis and Vellerind's (2000) main contribution is pointing out that selling negotiations are not as neutral as other institutional conversations, since the sellers' aim is to be friendly with the clients. The authors show that Estonian sellers use colloquial language (e.g. *oled siruli* 'you are sick', lit. 'lying flat') and exaggerated emotional reactions (e.g. *suurepärase* 'great') to achieve this aim.

## 6.2. Politeness patterns

Single human beings may be addressed either in singular or plural, the latter being the "polite" variant. Other possibilities include 3SG forms, usually in combination with honorifics *härä* 'Mr', *proua* 'Mrs', and *preili* 'Miss', as well as 1PL forms with their motherly tone. Generic means and impersonal mood may be used to avoid any personal reference, even for reasons of politeness.

The usage of the single and plural address forms in Estonian (*sina/sa* 'you:SG', *teie/te* 'you:PL', and the respective verb endings) has been studied in the form of a questionnaire among 8–9, 14–15, and 17–18 year old informants (Keevallik 1999b). The address system was shown to be primarily symmetrical and not dependent on hierarchic factors other than probably age. Children and very old people are commonly addressed in the singular but otherwise the choice of an address form seems to depend on solidarity/distance estimations. The system is rigid – the pattern established can usually be changed for strategic reasons only, e.g. when the teacher wants to express irony towards an inattentive student by saying *Kas ma võiksin teid segada?* 'May I disturb you:PL?'

As the sphere of singular is clearly widening in the speech community and young people seem to lead the change, it was quite surprising that only 20% of the informants supported its general usage.

## 6.3. Cross-cultural comparisons

Sometimes the practices of a speech community can better be outlined in comparison with other communities and cultures.

A comparative look at live radio broadcasts in Estonia and Finland (Pajupuu 1995) revealed that the time-patterns of these conversations were very different. The Finnish dialogue was generally slower (Estonians said 152 words per minute and Finns 114), Finnish speakers' turns and pauses were longer, and they talked less simultaneously.

Compared to Canadians, Estonians have been demonstrated to be less likely to introduce conversations, less likely to attribute negative characteristics to untalkative people or to feel uncomfortable with silences in conversations with family members. Estonians appeared more tolerant of silence both in conversations with friends and strangers, while they were also more likely to believe in solving interpersonal problems through talking (Kivik 1998, questionnaires).

Apart from the above, lay observations such as Estonians' scarce eye contact, facial expression, and gestures, our dislike for excessive touching and inability to react to non-verbal signals, have not yet been subject to actual studies. A classification of pointing and referring gestures has been worked out on the basis of arranged task-oriented conversations (Tenjes 1996, 2001).

Excerpts from two cross-linguistic conversations between Estonian and Russian teenagers are described in Hennoste and Vihalemm (1998). The informants' task was to speak in Estonian (sometimes on pre-determined topics), but regardless of that, there was a lot of dynamic language switching in the conversations since the Estonian subjects also had some proficiency in Russian. The authors observed that the Russian subjects were generally passive: topic focus was changed by the Estonians, who also collaborated better; Russians were not able to use particles adequately, and talked associatively without connecting their thoughts. The same authors (Hennoste, Vihalemm 1999) have also classified the communication strategies used by Russians speaking Estonian – speakers of L2 may avoid certain topics, postpone or abandon their turns, and reformulate, mumble, make literal translations, circumlocute etc. because they are not competent enough.

From a developmental perspective, Tulviste has studied interaction between Estonian mothers and children in contrast to Swedish and American pairs. She has found that Estonian mothers regulated their 2-year-olds' behaviour significantly more often, and more frequently with imperatives than other mothers. At the same time, Estonian mothers prompted children's conversational participation less often than others (Junefelt, Tulviste 1997). Estonian children are thus expected to talk less, and prompting does not become more frequent even in the pairs with 4-year-olds, 6-year-olds, and teenagers (Tulviste 1998). Estonian mothers give more direct comments than indirect ones, and the socialization of verbal politeness in the form of saying *please* and *thank you* comes apparently later than e.g. in the Japanese culture (Tulviste 1995).

## 7. Summary

There is no doubt that many of the features presented here will eventually fail to match all the criteria for colloquiality listed in the introduction, i.e. *non-standard*, *spoken*, *common*, and *informal*. In some cases we have had to rely on results that are valid rather in more formal settings or may prove to be regionally and socially limited. Still, for the time being they may help us to approach the variety we were interested in.

Out of the four criteria of Colloquial Estonian, the standard vs. nonstandard features have been subject to wider interest in the relatively abundant research on standardization (see chapter IV). Even certain dialectal vs. common features have been touched upon in these studies, although not so often from the point of view of spreading but rather as more or less suitable for the standard. The growing corpora should soon provide us with more adequate information on present-day spreading of linguistic features. Only after we have arrived at a solid ground as far as the spreading goes, can we start drawing serious conclusions about the dialectal/regional origin of Colloquial Estonian and its regional variation.

At the same time, research on spoken vs. written and informal vs. formal language is very new and apart from the general quantitative information on the occurrence of various items, requires new and different methods. This is by no means a problem of Estonian linguistics only, but e.g. the inclusion of prosody in accounting for linguistic units is an absolute necessity when working with spoken (interactional) language. Another important matter of fact is the production of language in real time, which prohibits us from analysing a bird's eye view of the language. These factors are most crucial as regards colloquial syntax, which is why we still have so few results in that area.

The chapter has reviewed studies with widely differing aims such as to correct language errors, to synthesize recognizable pitch contours, and to characterize Tallinn slang lexicon. On the other hand, we have been able to include statistical results from a couple of spoken language variables, take a look at a systematic analysis of phone-call openings, a possible development of an article in Spoken Estonian, etc. This conglomeration represents the state of the art in the study of Colloquial Estonian.

## Transcription conventions

<u>underlining</u>	– stress or emphasis
-	– truncation
[ ]	– overlaps
=	– latching or continuation of the same speaker across intervening lines, in the Tartu corpus even latching words
(0.5)	– pause length in tenths of a second
(.)	– micropause
(...)	– a longer pause in the Tartu corpus
:	– lengthening of a sound
@	– a laughter syllable
hh	– breathing out
/---/	– something has been left out from the same turn in the example
?	– used either as in the written standard (some authors) or for intonation (the Tartu corpus) or not at all (the LK corpus)

## Glossing conventions

(The level of detail differs as judged relevant for the discussion.)

ABL	ablative	PRT	partitive
ADS	adessive	PL	plural
ALL	allative	S	subject
COMP	comparative	SG	singular
COND	conditional	SUP	superlative (inflectional)
ELT	elative	TRA	translative
F0	fundamental frequency	V	verb
GEN	genitive	QUES	question particle <i>kas</i>
ILL	illative	Q1, Q2, Q3	the quantities
IMF	imperfect	1, 2, 3	person
IMP	imperative	/	alternative translations
INF	infinitive	–	overlong quantity
INS	inessive	ː	palatalization
IPS	impersonal	:	separates the abbreviations of grammatical categories
NEG	negation (particles <i>ei, ära</i> )	(not)	the item is lacking in the original
NOM	nominative		
NP	noun phrase		
O	object	other	
PPT	past participle	capital	
PR	present	letters	untranslatable particle

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# VI.

## STUDY OF ESTONIAN\*

*Mati Erelt*

### 1. Description of Estonian in the 17<sup>th</sup> and 18<sup>th</sup> centuries<sup>1</sup>

The study of Estonian began in the 17<sup>th</sup> century. Baltic German pastors compiled practical language guides and dictionaries following the example of Latin and German grammars. Heinrich Stahl published the first Estonian grammar with the dictionary *Anführung zu der Esthnischen Sprach* in Tallinn in 1637. It described North Estonian. A grammar of South Estonian with a dictionary came next – *Observationes grammaticae circa linguam Esthonicam* by Johannes Gutsclaff, which was published in Tartu in 1648. It was followed by Heinrich Göseken's grammar of North Estonian with a dictionary *Manuductio ad Linguam Oesthonicam, Anführung zur Öhstnischen Sprache* (1660) and Johann Hornung's *Grammatica Esthonica* (1693). The latter summarized the spelling reform launched by Bengt Gottfried Forselius in the 1680s. Hornung's grammar was the only Estonian handbook of the 17<sup>th</sup> and 18<sup>th</sup> centuries that did not include a dictionary. The 18<sup>th</sup> century saw the publication of some more handbooks of this kind: Anton Thor Helle's *Kurtzgefaszte Anweisung zur Ehstnischen Sprache* (1732) and August Wilhelm Hupel's *Ehstnische Sprachlehre für beide Hauptdialekte, den revalschen und den dörptschen; nebst einem vollständigen Wörterbuch* (1780; enlarged edition 1818), which covered both North Estonian and South Estonian. Hupel's handbook summarizes the previous research into Estonian, and this book was widely known. When the first lectureship of Estonian was set up at the University of Tartu in 1803 (the first lecturer was Friedrich David Lenz), then Estonian was taught according to Hupel's grammar.

\* The study was partly supported by grant no. 5202 of the Estonian Science Foundation.

<sup>1</sup> For a more detailed treatment of periods 1–3 see Laanekask, Erelt (this volume).

## 2. 19<sup>th</sup>-century Estophiles

When the Enlightenment reached Estonia at the beginning of the 19<sup>th</sup> century, the Baltic German intellectuals and some intellectuals of Estonian origin in their ranks took a deeper interest in the Estonian language. The Estonian language was dealt with in the Estophile cultural societies, the best known of which was the Learned Estonian Society (*Gelehrte Estnische Gesellschaft*, founded in 1813). In 1813–1832 Johann Heinrich Rosenplänter published the journal *Beiträge zur genauern Kenntniß der ehstnischen Sprache* in Pärnu. It was the first scholarly journal devoted to Estonia, where a large number of outstanding articles on the Estonian language was published by the best researchers of those days (Kristian Jaak Peterson, Otto Wilhelm Masing, Arnold Friedrich Johann Knüpffer, Johann Friedrich Heller, and others). They came to an understanding that Estonian was related to Finnish; they started to follow the Finnish example in the grammatical description and to promote the transition from the previous German spelling system to the Finnish spelling system. The highlight of the first half of the 19<sup>th</sup> century was the Finnish-inspired *Grammatik der Ehstnischen Sprache Revalschen Dialektes* by Eduard Ahrens (1843; enlarged edition 1853), which laid the foundation to the new spelling system. The second edition of Ahrens' grammar includes the first comprehensive syntax of Estonian. During the same period Friedrich Robert Faehlmann, lecturer in Estonian at the University of Tartu, published a number of studies on Estonian morphology in the publications of the Learned Estonian Society. Ferdinand Johann Wiedemann came to be the great Estonian linguist of the 19<sup>th</sup> century. He was a erudite Finno-Ugric scholar, who published extensively also on the other Finno-Ugric languages. His most important publications concerning Estonian include the comprehensive Estonian-German dictionary *Ehstnisch-deutsches Wörterbuch* (Wiedemann 1869), the bulky descriptive grammar of Estonian popular language, which is considered to be the first academic grammar of Estonian (Wiedemann 1875), and a study of the Võru dialect of South Estonian (Wiedemann 1864).

## 3. Study of Estonian during the period of national awakening

The period of national awakening in the second half of the 19<sup>th</sup> century witnessed the emergence of national language study. Mihkel Veske and Karl August Hermann, the first Estonians with a doctorate in linguistics, had received their education in Germany. Veske, lecturer in Estonian at the University of Tartu, studied the history of the Estonian language and introduced the method of comparative historical linguistics to the study of Estonian. He is

also the author of the first Estonian-language study of the Estonian language *Eesti keele healte õpetus ja kirjutuse wiis* ‘Estonian phonetics and spelling’ (Weske 1879), which also provides a systematic treatment of degrees of quantity in Estonian. In 1875–1884 Veske conducted fieldwork on North Estonian dialects, and he established the extent and boundaries of the central dialect of North Estonian. The first survey of Estonian dialects had been provided by Wiedemann (1873). Hermann wrote the first Estonian-language grammar *Eesti keele Grammatik* (1884, syntax 1896), which made a great impact on the unification of Standard Estonian and laid the groundwork for the grammatical terminology in Estonian. Also, Jakob Hurt, the great man of national awakening, was a trained linguist. He published mostly on derivation and earned his doctorate at the University of Helsinki (1886). During the second half of the 19<sup>th</sup> century the Estonian Society of Literati (*Eesti Kirjameeste Selts*, 1872–1893) became a major centre for the planning and research of the Estonian language. During the Russification period, which started in the 1880s, the cultural societies were closed down, and school education was provided only in Russian. The study of Estonian came to a standstill. As previously, the University of Tartu had only a lectureship in Estonian (1874–1886 Veske, 1889–1909 Hermann). The efforts to establish a professorship in Estonian failed because of the opposition of the anti-Estonian position of the university authorities. At the turn of the century it was the University of Helsinki that became the centre of research into the Estonian language (Eemil Nestor Setälä, Jooseppi Julius Mikkola, Heikki Ojansuu, and others). Also, the future Estonian-language planners and researchers received their education in Helsinki.

#### 4. Study of Estonian during the first half of the 20<sup>th</sup> century

When the grip of the Tsarist government loosened after the 1905 revolution, the development of the Estonian language resumed at full speed. This period can be called the period of forced development of the standard language (see Laanekask, Erelt in this volume). During the first decades of the 20<sup>th</sup> century the Estonian Literary Society (*Eesti Kirjanduse Selts*, 1907–1940) was the major force behind the development of Standard Estonian. The first orthographical dictionary *Eesti keele õigekirjutuse-sõnaraamat* ‘A spelling dictionary of Estonian’ was published in 1918. In Finland Lauri Kettunen studied Estonian historical phonetics. Kettunen’s doctoral thesis about the history of sounds in the Kodavere sub-dialect (Kettunen 1913–1914) and its continuation (Kettunen 1913) introduced experimental phonetics to the study of Estonian. In Estonia the study of the Estonian language picked up after the Uni-

versity of Tartu became an Estonian-language university. The professorship of Estonian at the University of Tartu was set up in 1919; Jaan Jõgever, the previous lecturer in Estonian, became the first professor to fill this position. In addition, two more professorships were set up. The Finn Lauri Kettunen was invited to fill the position of the professor of Finnic languages. Julius Mark became professor of Uralic studies. From now on one did not have to go to Helsinki in order to study Estonian and its related languages. The study of Estonian focused on the collection and analysis of dialect material. The aim was to compile a comprehensive dictionary of the popular language. In 1920 the Mother Tongue Society (*Emakeele Selts*) was set up at the University of Tartu. One of its aims was to collect and coordinate the research of dialect material. The society published its own journal *Eesti Keel* 'Estonian Language' (1922–1940) and proceedings. The collection of dialect materials was guided by Andrus Saareste, professor of Estonian at the University of Tartu (1925–1941). Saareste is the most outstanding Estonian dialectologist who introduced language geography to the study of Estonian dialects. He worked out the classification of Estonian dialects (Saareste 1932a, 1932b, 1952), studied the lexical relations between the dialects (Saareste 1924), and compiled dialect atlases (Saareste 1938, 1941, 1955). After the Second World War Saareste continued his research in Sweden where he published a four-volume conceptual dictionary of Estonian (1958–1963) that covers both dialects and the standard language. As a versatile scholar Saareste studied also the older written language (in 1927–1931 Saareste published together with Arno Rafael Cederberg a selection of texts in the older written language), language planning and grammar, and compiled surveys about Estonian (Saareste 1932a, 1952b, 1959, Raun, Saareste 1965). Also, Julius Mägieste studied the older written language (cf. Laanekask, Erelt, this volume). Mihkel Toomse studied the Estonian dialects (Toomse 1941). Lauri Kettunen made a lasting contribution to Estonian linguistics. As early as 1917 he published a comprehensive phonetic history of Estonian; he studied the origin of Estonian place names and later published a summarizing paper (Kettunen 1955). Kettunen also wrote a textbook of Estonian syntax for university students (Kettunen 1924), which for fifty years served as the basis for traditional syntax. At the end of the 1930s Paul Ariste achieved good results in the study of Estonian phonetics and introduced phonology to Estonian linguistics (Ariste 1939a, 1939b, 1941). Ariste also published a number of studies on loanwords (mainly Swedish and Low German loans; Ariste 1933, 1939c, 1940). The prescriptive approach predominated in the study of contemporary Estonian until the end of the period. Johannes Voldemar Veski and Elmar Muuk compiled a bulky orthological dictionary *Eesti õigekeelsuse-õnaraamat* 'Dictionary of Estonian correct usage' (1925–1937). Johannes Aavik wrote a com-

prehensive guide to correct usage (Aavik 1936). A large number of school and popular grammars was published (see e.g. Muuk 1927a, 1927b, Muuk, Tedre 1930). Valter Tauli began to generalize the experience of Estonian language reform into a theory of language planning (Tauli 1938).

### 5. Study of Estonian after the Second World War

The majority of the best-known Estonian linguists emigrated (mostly to Sweden) at the end of the war (Andrus Saareste, Julius Mägist, Valter Tauli, and others), where they continued their research. Of the outstanding linguists Paul Ariste, Johannes Voldemar Veski, and Arnold Kask stayed in Estonia. Immediately after the war there was a low point in the study of Estonian. In Estonia research picked up in the late 1950s when the first post-war generation of linguists emerged, and new research findings came in addition to the Department of the Estonian Language and the Department of Finno-Ugric Languages also from the Institute of Language and Literature (*Keele ja Kirjanduse Instituut*), now called the Institute of the Estonian Language (*Eesti Keele Instituut*), which was founded in 1947. The year 1958 saw the publication of the journal *Keel ja Kirjandus* 'Language and Literature', and the journal *Sovetskoe finno-ugrovedenie* 'Soviet Finno-Ugric Studies', now called *Linguistica Uralica*, was founded in 1965. The Mother Tongue Society became active again; it organized the collection of dialect materials, held meetings and language days, and published its own proceedings *Emakeele Seltsi aastaraamat* 'Yearbook of the Mother Tongue Society'. The popular-scientific language magazine *Oma Keel* 'Our Own Language' was launched in 2000.

After the war **phonetic** research was continued in Tartu by Paul Ariste (textbooks of phonetics *Eesti foneetika* 'Estonian phonetics' 1946 and *Eesti keele foneetika* 'Phonetics of the Estonian language' 1953). In the 1960s the Laboratory of Experimental Phonetics at the Institute of Language and Literature became a major research centre of phonetics (Georg Liiv, Arvo Eek, Mart Remmel, and others). In 1972–1985 the research group published *Estonian Papers in Phonetics* (edited by Arvo Eek). Estonian phoneticians were given the honour of organizing the Eleventh Congress of Phonetic Sciences in Tallinn in 1987. In the 1990s the phonetics of the Estonian language has been studied at the Laboratory of Phonetics and Speech Technology of the Institute of Cybernetics at the Tallinn Technical University (Einar Meister and Arvo Eek), the Institute of the Estonian Language (Meelis Mihkila, Hille Pajupuu (Piir)), and the University of Tartu (Jaan Ross, Karl Pajusalu, Pire Teras, and Merike Parve). Outside Estonia Ilse Lehiste (USA) has made a

valuable contribution to the development of Estonian phonetics. Estonian phonetics is also studied at the Department of Linguistics of the University of Stockholm (Diana Krull). Many researchers have been interested in the peculiar three-degree quantity system in Estonian about which a number of competing hypotheses have been put forward (see e.g. Lehiste, Ross eds 1997, Ross, Lehiste 2001). Until now relatively little work has been done on intonation (for a discussion of previous research see Asu 2001). There are numerous acoustic and perception studies of Estonian speech sounds. There are also some earlier articulatory studies. However, there is no comprehensive treatment of the Estonian phonetic system. Recent years have witnessed the study of the phonetics of South Estonian dialects, first and foremost the vowel system (e.g. Pajusalu *et al.* 2000, 2001). As far as the applications of phonetics are concerned, the Institute of the Estonian Language in cooperation with the Institute of Cybernetics worked out a text-speech synthesizer in the 1990s.

The second half of the 1950s witnessed a new interest in the study of **grammar** of Standard Estonian. There was a plan to pool the expertise of linguists working in Tartu and Tallinn in order to compile an academic grammar of Estonian. However, only a small proportion was completed. Some fascicles on phonetics and morphology were published in Tartu, and the Institute of Language and Literature published *Eesti keele lauseõpetuse põhihooned I* 'Principal features of Estonian syntax I' (Mihkla *et al.* 1974). In Uppsala Valter Tauli wrote a complete two-part grammar of Estonian that was published both in Estonian and English (Tauli 1972, 1980, 1973a, 1983). In the 1960s modern research methods and theories were applied to the study of grammar (structural linguistics and generative grammar). We should give full credit to the group of generative grammar, supervised by Huno Rätsep, that worked in 1965–1973 at the Department of the Estonian Language at the University of Tartu. Their publications include *Keel ja struktuur* 'Language and structure' (Vol. 1–10) and *Keele modelleerimise probleeme* 'Some problems of modelling the language' (Vol. 1–7). The reformation of grammatical description was continued in 1976 by a group of grammarians at the Institute of Language and Literature (the publication *Ars Grammatica*). The group completed an academic grammar of Estonian (EKG II 1993, EKG I 1995; editor-in-chief Mati Ereht). The 1980s and 1990s witnessed some new trends in Estonian grammar, such as typological grammar and cognitive grammar. Now grammatical research is increasingly based on text corpora. A smaller corpus of 20<sup>th</sup>-century Standard Estonian was set up at the University of Tartu, which consists of the subcorpora of the different decades (<http://www.cl.ut.ee/ee/corpusb/tykk.html>) and a larger corpus (about 20 million tokens), which is supplemented on a daily basis, covers Standard Estonian in the 1990s and 2000s (<http://www.cl.ut.ee/ee/uuedkorpused/index.html>). Also, a corpus of

Spoken Estonian was set up at the University of Tartu in the 1990s (<http://sys130.psych.ut.ee/~linds/>), which allows to study spoken language (especially Hennoste 2000, 2001, for a detailed treatment see Keevallik, this volume). A large number of papers on Standard Estonian have been published both inside and outside Estonia.

The main issue in Estonian **phonology** has always been the quantity system. The treatment of the Estonian phonemic system depends on the latter. Various treatments can be found, for example, in Ariste 1939a, 1939b, 1953, Harms 1962, Hallap 1963, Viitso 1962, 1979, 1981, 1986, Hint 1965, 1973, 1983, 1987, 1997, Tauli 1973b, Lehiste 1985, Wiik 1985, Eek 1986, Eek, Help 1986, Eek, Meister 1997. In addition to quantity, to some extent also stress (Hint 1973, 1997) and palatalization (Hint 1987, 1998a, Viitso 1981) have been studied from the phonological perspective. Also, the phonotactics of Estonian has been studied (see e.g. Hint 1998a).

**Morphology.** In Estonian linguistics morphology has usually meant only the formation of forms. The main issues have been gradation and other stem changes, that is, morphophonological processes (e.g. Viitso 1962, Hint 1997, Eek, Help 1986, and many others) and allotactics, that is, the conditions of co-occurrence of allomorphs in word forms and the classification of words into inflectional types. Depending on the classification criterion and the purpose of the morphological description, rather different (one- or two-level) typologies have been suggested (Kask 1963: a survey of earlier classifications; Viitso 1976, Viks 1982, Peebo 1987, 1992, and others). The problems of describing the morphological system as a whole became a centre of interest in the 1970s. Ülle Viks worked out the so-called model of classificatory morphology (Viks 1977, 1982, 1994). She also compiled a special morphological dictionary (Viks 1992). Toomas Help supplemented the classificatory morphology with some ideas of natural morphology by making a distinction between active and passive morphology (Help 1985, 1995). In less elaborate form some other methods of describing morphology have been suggested as well (Ehala 1997, Hint 1998b, Saari 1998, 1999a). Side by side with theoretical morphology the linguists working at the Institute of the Estonian Language and the University of Tartu have dealt with computational morphology as well. For this purpose Viks developed her model of classificatory morphology into the model of the so-called open morphology (Viks 2000).

**Word formation.** Until the 1970s the diachronic trend predominated. Linguists were mostly interested in the development of affixes and compounding patterns. Synchronic descriptions focused on the prescriptive aspect. The 1970s saw the development of the descriptive-synchronic approach. Word formation started to be analysed as separate from the lexicon, as a

rather regular grammatical mechanism that was nevertheless different from morphology. The first comprehensive treatment of this new approach could be found in Tauli's grammar (1972, 1973a). The theoretical substantiation of the new approach was summarized by Silvi Vare (1979). More recently, however, the sharp distinction between synchrony and diachrony and the treatment of word formation as a completely independent grammatical phenomenon have started to disappear (Saari 1997, Kerge 1998). More extensive descriptive treatments of derivation in Estonian are as follows: noun derivation – Kasik 1975, Vare 1981; adjective derivation – Vare 1984; verb derivation – Kasik 1991, 1996b, 1997. A comprehensive description of all the areas of derivation can be found in addition to the grammars (Tauli 1972, 1973a, EKG I) also in Kasik 1996a. Less work has been done on compounding from the descriptive-synchronic perspective than on derivation. A survey of the problems involved in the description can be found in Kerge 1990 and Saari 1997.

**Morphosyntax and syntax.** Until the 1960s Estonian syntax was described traditionally in terms of word combinations. In the 1970s the concept of the phrase was introduced in Estonian syntax. Two earlier academic treatments of syntax (Mihkla *et al.* 1974, Tauli 1980, 1983) out of three are treatments of the word combinations. The most recent one (EKG II), however, is based on the phrase. Since the Second World War Estonian morphosyntax and syntax have been dealt with in hundreds of publications. There is a comprehensive treatment of clause patterns in terms of parts of speech and morphological categories (Rätsep 1978). There are also some treatments of word order (Remmel 1963, Tael 1988, 1990, Huumo 1993, 1994, 1995). Of verbal categories there are some comprehensive studies of the mood (Rajandi 1999, see also Pihlak 1993), time (Metslang 1994, see also Metslang, Tammola 1995), and negation (Sang 1983, see also Rajandi 1967), but there are also some studies of the evidential moods – the quotative and the jussive (Rätsep 1971, Muizniece *et al.* 1999, Metslang, Pajusalu 2002, M. Ereht 2002) and the aspect (Sulkala 1996, Metslang 2000). Of speech acts there is a comprehensive study of the interrogative sentence (Metslang 1981). The exclamatory sentence has been studied to some extent as well (Metslang 1990). Apart from verb syntax, there are separate studies of adjective syntax, including the gradation of adjectives (M. Ereht 1986, see also M. Ereht 1973, M. Ereht, Punttila 1996). Of the nominal parts of the sentence the subject (Nemvalts 1996) and the object (Kont 1963, Rajandi, Metslang 1979) have deserved more attention with their complicated alternation of totality and partiality. The complex sentence has been studied from the perspective of non-finite clauses (Uuspõld 1966, see also Uuspõld 1970, 1980, 1982). Discourse analysis has been studied at the University of Tartu since the 1970s.

The researchers of the Institute of the Estonian Language study the **vocabulary of Standard Estonian** and compile dictionaries. The institute also has the largest collection of the vocabulary of Standard Estonian – the archive of the standard language (card file of 20<sup>th</sup>-century Standard Estonian), which amounted to about 4.3 quotation slips in 2002. The institute has prepared a number of orthological dictionaries (VÕS, ÕS 1960, ÕS 1976, ÕS 1999). In addition, the seven-volume *Eesti kirjakeele seletussõnaraamat* ‘Explanatory dictionary of Standard Estonian’ has been published since 1988. Some other dictionaries prepared by the institute and elsewhere include those of new words (R. Raag 1979, T. Ereht 1983, T. Ereht *et al.* 1984), synonyms (Õim 1991, Saagpakk 1992), antonyms (Õim 1995), and idioms (Õim 1993). The existing studies of the vocabulary of Standard Estonian cover onomatopoeic and sound-symbolic words (Põlma 1967, Veldi 1997, Mikone 2002), phraseology (Vakk 1970), and words denoting sensory perception (Sutrop 2002, Vainik 2002).

In Estonian **dialectology** (for a more detailed treatment see Pajusalu in this volume) the collection, systematization, and description of the dialect material continued after the Second World War as well. This work has been conducted by the Institute of the Estonian Language, the Mother Tongue Society, and the University of Tartu. The Institute of the Estonian Language, a major research centre of Estonian dialects, started the publication of *Eesti murrete sõnaraamat* ‘A dictionary of Estonian dialects’ in 1994. The dictionary is based on the dialect collections of the institute. The macrostructure of this dictionary had already been published as a separate dictionary entitled *Väike murdesõnastik* ‘Shorter dialect dictionary’ (I–II, 1982–1989). Another major project of the Estonian Language Institute is the publication of a series of dialect texts *Eesti murded* ‘Estonian dialects’ (I–VIII, 1961–2002), which covers all the Estonian dialects. The Institute of the Estonian Language and the Department of the History and Dialects of the Estonian Language have launched a joint project to set up an electronic corpus of Estonian dialects, which as of 2002 contains about 400,000 tokens from all the Estonian dialects. Since Andrus Saareste the Estonian dialectologists have focused on the establishment of dialect boundaries and the classification of dialects. The grammar and vocabulary of the Estonian dialects have been studied mostly on the basis of a single dialect or sub-dialect; there are relatively few treatments that would cover all the Estonian dialects. Comprehensive lexical and grammatical surveys are available about the north-eastern coastal dialect (Must 1987) and the central dialect (Must, Univere 2002). There has been more emphasis on the vocabulary and less on the grammar. The treatment of dialect syntax is especially rare. In the 1990s experimental phonetic studies of the Estonian dialects (mostly the Võru dialect) were

resumed after a longer break at the University of Tartu. The sociolinguistic trends were introduced to Estonian dialectology in the 1980s and especially in the 1990s. It was related to the decline of the traditional territorial dialects and the need to study the new regional and social sublanguages. One of the central research topics is the study of dialect contacts (especially Pajusalu 1996 and Vaba 1997). The efforts to create the Standard Võru language have stepped up research into the Võru dialect especially at the Võru Institute and the University of Tartu. There has also been some scholarly interest in the Estonian language outside Estonia, especially in Sweden (Raag 1982, 1991, Roos 1980). For an overview of the Estonian language outside Estonia see Hennoste 1998.

Dialect research is closely related to the study of **place names**, which is carried out by the Institute of the Estonian Language. The institute has a cumulative file of Estonian place names. There are comprehensive studies of place names in northern Tartumaa (Pall 1969, 1977) and Saaremaa (Kallasmaa 1996, 2000).

The university textbook *Eesti murded ja kohanimed* 'Estonian dialects and place names' (Pajusalu *et al.* 2002) summarized the research findings of Estonian dialectology and onomastics.

**History of the Estonian language** (see Viitso II. in this volume) has always been an important research area in Estonian linguistics. It has been treated mainly from the perspective of the comparative historical linguistics, nowadays also from the typological perspective and on the basis of grammaticalization theory. In historical grammar there are many studies in phonology, morphology, and word formation. Historical syntax has been largely neglected. There are also some general grammatical treatments – a phonetic history (Kask 1967) and a history of noun morphology (Rätsep 1977, 1979). However, until now there is no complete historical grammar. There are many studies concerning the origin of Estonian vocabulary. The most important recent lexical studies cover Latvian loanwords (Vaba 1997), Russian loanwords (Must 2000), and the origin of South-Estonian vocabulary (Koponen 1998). General brief overviews of the origin of Estonian vocabulary can be found in Raun, Saareste 1965 and Rätsep 1983. In Sweden Julius Mägiste compiled a comprehensive etymological dictionary of Estonian *Estnisches etymologisches Wörterbuch* (Mägiste 1982–1983), which is unfortunately unfinished due to the death of the author. The Institute of the Estonian Language has created an etymological database of Estonian vocabulary and has started to compile a new etymological dictionary.

The origin and development of the Estonian language and its dialects were discussed by Ariste 1956, Kask 1956, Raun, Saareste 1965, Rätsep 1989, Viitso 1985, 2001, Pajusalu 2000.

The typological shifts that have taken place in the structure of Estonian were discussed by Tauli 1966, Rätsep 1981, and Viitso 1990.

The application of the grammaticalization theory has provided new findings first and foremost in morphosyntax – in the study of time (Metslang 1994, 1996), evidentiality (Campbell 1991, Muizniece *et al.* 1999), modality (Habicht 2001, M. Ereht 2001), and adpositions (Ehala 1994, Ojuskangas 2001).

**The history of Standard Estonian** has been studied at the University of Tartu and to some extent also at the Institute of the Estonian Language and elsewhere (see also Laanekask and Ereht, this volume). The research has mostly focused either on an author or a text, that is, the usage of a single author or individual texts has been discussed. The approach has been purely descriptive, bringing out the linguistic peculiarities in comparison with the contemporary language, or explanatory (dialect background, German influence, etc.). Most studies deal with the vocabulary of the authors or texts. There are also some treatments of morphology, but syntax has been largely neglected. The general treatments include *Eesti kirjakeele ajaloost I–II* ‘Concerning the history of Standard Estonian I–II’ by Arnold Kask (1970) and *Eesti murded ja kirjakeel* ‘Estonian dialects and the standard language’ by the same author (Kask 1984). Considering the needs of author-centred and text-centred research, the University of Tartu started to create a corpus of the oldest written language in the mid-1990s (<http://www.murre.ut.ee/vakkur>). The corpus covers all the Estonian-language texts published before the 16<sup>th</sup> century and a number of important 17<sup>th</sup>-century texts. Several authors’ dictionaries and grammatical surveys have been written on the basis of this corpus (Ehasalu *et al.* 1997, Habicht *et al.* 2000, Kingisepp *et al.* 2002).

Less attention has been paid to the development of language phenomena in the course of a shorter or longer period of time. The introduction of the new spelling system in the 19<sup>th</sup> century has been studied most thoroughly (especially Kask 1958). Of grammatical phenomena one can find studies of the manifestations of the partitive plural in the older written language (Valmet 1986), and possessive suffixes (Mägiste 2000). Morphosyntax and syntax are represented by a study of the development of the *saama*-future (Mägiste 1936) and the agreement of the adjectival attribute (Nurkse 1937). There are also some studies of individual words. A brief overview of the development of grammar and vocabulary can be found in Raun and Saareste (1965).

In the field of the general theory of **language planning** (see also Laanekask, Ereht in this volume) Valter Tauli’s *Introduction to a Theory of Language Planning* (Tauli 1968) became an internationally acclaimed standard work. The theory of Estonian language planning was advanced also by

Henn Saari (1999b). Tiiu Erelt wrote a survey of the development of the language planning principles from the time of national awakening to the end of the 20<sup>th</sup> century (T. Erelt 2002). LSP language planning has been advanced by Tiiu Erelt (*Eesti oskuskeel* 'Estonian specialized language', 1982), Henn Saari (1989), Rein Kull (2000), Uno Mereste (2000), and others. Name planning has been dealt with by Henn Saari (T. Erelt, Saari eds 1993: 5–44) and Peeter Päll (1999).

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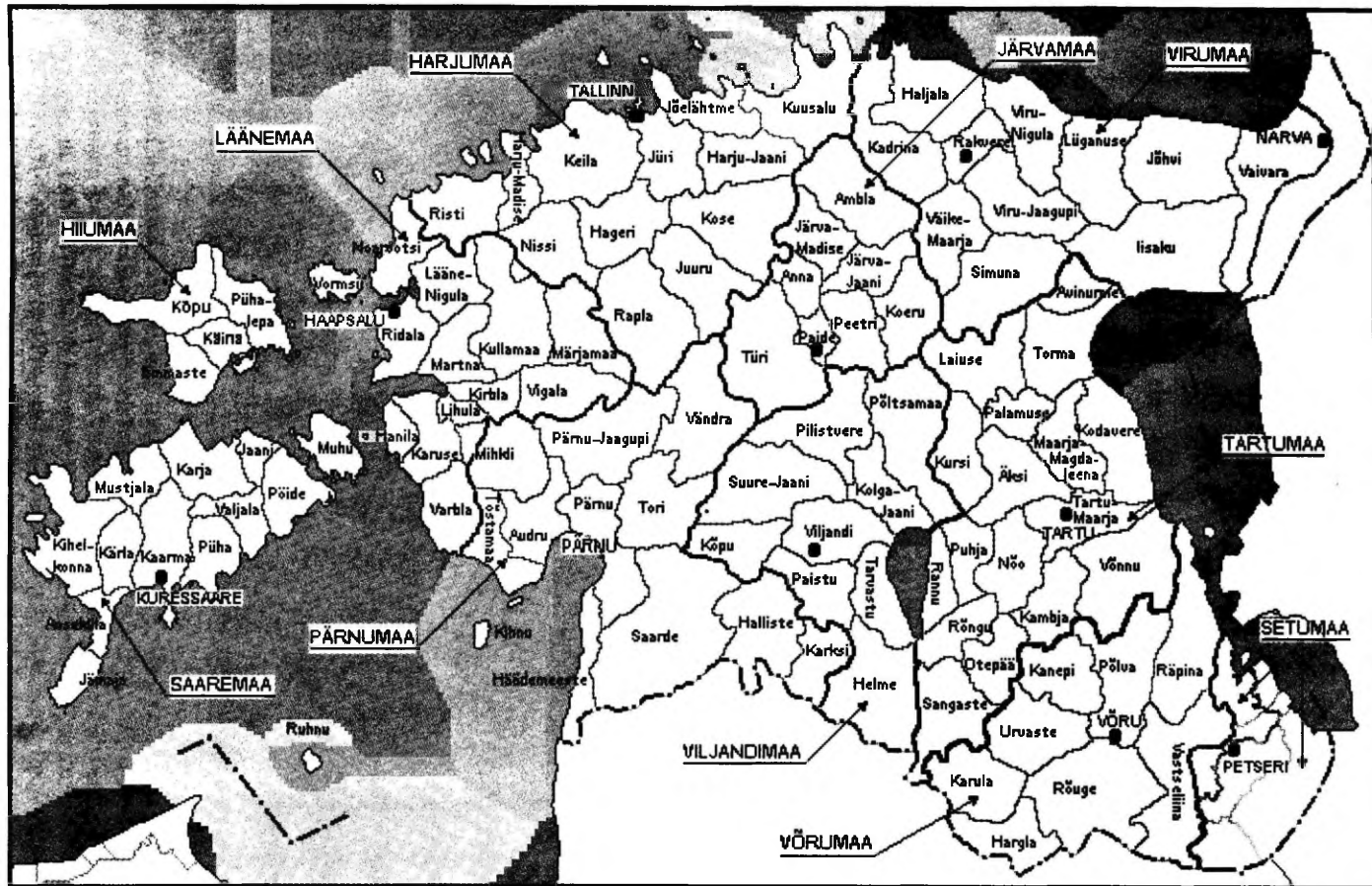
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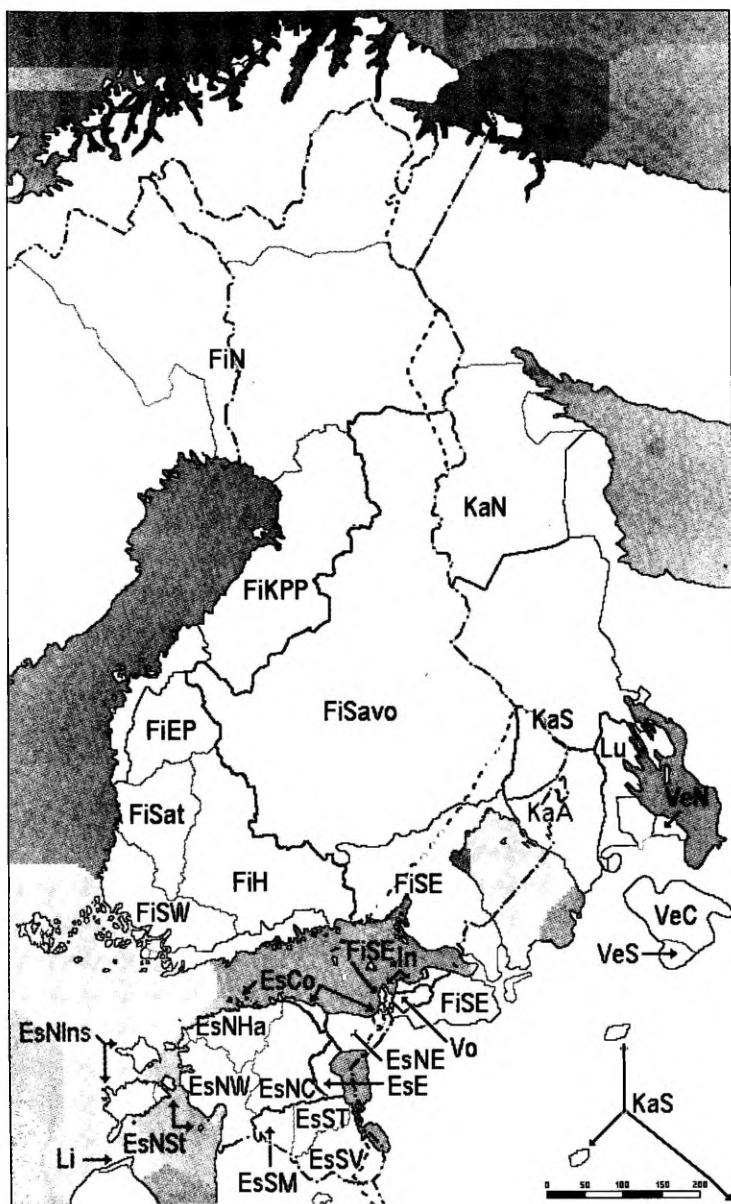
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## Appendix 1. The historical territorial division of Estonia



## Appendix 2. Finnic dialects



**Abbreviations:** EsCo Coastal Estonian, EsE East Estonian, EsNE North-East Estonian, EsNC central North Estonian, EsNHu Harjumaa North Estonian, EsNins Insular North Estonian, EsNST Straits North Estonian, EsNW western North Estonian, EsSM Mulgi South Estonian, EsNT Tartu South Estonian, EsNV Võru South Estonian; FiEP Etelä-Pohjanmaa Finnish, FiH Häme Finnish, FiKPP Keski-Pohjanmaa and Pohjois-Pohjanmaa Finnish, FIN North Finnish, FiSat Satakunta Finnish, FiSE South-East Finnish, FiSW South-West Finnish; In Ingrian; KaA Aunus Karelian, KaN North Karelian KaS South Karelian; Li Livonian; Lu Lude; VeC Central Veps, VeN North Veps, VeS South Veps; Vo Votic

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- Volume 1. Estonian Language. Edited by Mati Erelt, Tallinn 2003;  
Second Edition, Tallinn 2007
- Volume 2. Ilse Lehist, Pire Teras, Toomas Help, Pärtel Lippus, Einar  
Meister, Karl Pajusalu, Tiit-Rein Viitso, Meadow Mari  
Prosody. Tallinn 2005